

# MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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## Manufacturers' Record.

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RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, Vice-President.  
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### COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

Referring to the pamphlet "Facts About the South," Mr. John H. Dill, cashier of the First National Bank of Mabank, Texas, writes to the Manufacturers' Record:

I wish to say that I am astonished at the growth of the South, and amazed at her recuperative power in regaining the commercial standing that she lost during the war and reconstruction days, and I heartily appreciate this little pamphlet.

### OUTLET FOR WEST VIRGINIA COAL.

The report that the Gould system will build to Washington, and also build a branch line to some port on the lower bay, ought to be accepted as good news by Baltimoreans and all others anxious to see the Gould system placed in an impregnable position. There is a large coal area in West Virginia which will naturally be tributary to Baltimore by the Gould system, and this coal will come here for shipment, but there is also a great coal field in that State whose output could not possibly be forced out of its natural channel to Baltimore. In order to get its full share of this traffic the Gould managers will be very wise if they strengthen their system by having a line which will tap that territory and carry its product to the best available point down the bay, and thus be prepared to meet the Norfolk & Western and Chesapeake & Ohio. This very act would strengthen their competitive power, and thus be of advantage to Baltimore by making more certain the power of the Gould system to stand against competition.

Several years ago the late Jed Hotchkiss, the distinguished engineer, who foresaw the development of the coal of West Virginia as perhaps no one else did in his day, said to the editor of the Manufacturers' Record that in twenty years there would be at least five great cities on the Chesapeake bay—Baltimore, Norfolk and Newport News be-

ing the three leading ones, to be followed by two others not then founded. Each of these places, he said, would in twenty years have 100,000 inhabitants, and they would be created to meet the pressure of West Virginia coal for tide-water outlets. The magnitude of the trade to come from West Virginia is realized by few people, but President Cassatt and George Gould and Senator Elkins have been among those who, foreseeing it, are playing a giants' game for its control. It will be great enough to tax all their roads and to enrich them all.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 58 and 59.

### GRASPING AT STRAWS.

Under the auspices of the British Cotton-Growing Association, which has a capital of \$250,000, experiments have been made in cotton-growing in Egypt, the Soudan, India, the Oceanic Islands, Uganda, and in West Africa at Sierra Leone, Lagos and the Lower Niger, and it has been officially announced that through the influence of Mr. Chamberlain, the British Colonial Secretary, the West African railways have agreed to give free carriage to cotton for two years, and the shipping companies have agreed to carry the first thousand tons of cotton without charge for freight. The West Indies, too, are looked to as possible cotton-raisers, and there are hopes in England that it will not be long before Lancashire shall be weaving Jamaica-grown cotton. About the most extreme manifestation of this movement in England is the moral drawn by the Textile Mercury from a very erroneous review by it of the race problem in this country. The Textile Mercury shows a sad misapprehension of conditions in this country, but upon it makes the following suggestion:

There are, however, instances of parallelism of a very striking character, and there is one such parallel to the condition of things we have hinted at as existing in the States—the ancient story of Israel in Egypt. After a long sojourn, longer than that of the negro in America as yet, the Pharaoh who ruled the country and oppressed the descendants of the Patriarchs was compelled to let them go. This Pharaoh seems to have been as great a tyrant as the Demos of the States. Would it not be well for the ruler of the modern time to profit by the example of the older one, and let the people go to their ancestral homes, where they can participate in the common privileges of humanity and develop their capacities under more favorable conditions? The founding of Liberia shows that this can be done, and the present time is a more favorable one than has ever occurred since the dark races were first carried across the Atlantic to the lands of the West. Africa is being reopened, and it is well known that there is abundant room there for every individual now living in the States who is in any sense smeared with color. Today, moreover, a condition exists such as has never been known before, that would help to make the resettlement of the negroes of America a great success. This is the want by the world of an increased supply of cotton, which the United States, under its repressive policy towards the negro race, will be quite unable to supply. Let facilities therefore be given for a new Exodus. Such would be a

grand parallel to the old one, and would be fit to stand alongside it in the history of the future for all time. And Englishmen may make an important contribution to the success of this movement; for Lancashire wants cotton; here are people who know how to grow it; the British colonies, dependencies and protectorates comprise ample lands for their location, and the reward is a grand one. Then why not, by granting the necessary help, win at least a share of it? The American people, we should think, would be thankful for such assistance in that direction towards the solution of a problem which seems insoluble to them.

Beyond the fact of slavery, there is absolutely no basis for a parallel of the Negro and the Jew in history. The two races cannot be compared, but they may be contrasted. One of the main points of their wide divergence is the unwillingness of the negroes to commit themselves to any mass-migration from the South. Fortunately for them and for the country, they are scattering from the South, about one-seventh of their total number now living in other parts of the country, and are thus serving as effective educators of public opinion. The whites are not compelling them to remain in the South, but they recognize the work which the negroes are doing in Southern development, and they would undoubtedly regret any movement likely to lead any large number of negroes back to the land of their primitive savagery and barbarism. Such a movement is by no means impossible, though its probability is far removed. By the time it could amount to anything practically America would be manufacturing all the cotton that America could produce, and other countries depending upon the South for their supplies of the staple would be absolutely helpless in that particular, unless they had in the meantime drilled the natives of their colonial possessions into cotton-growers.

### HANDLING THE FORESTS.

While in many parts of the United States there still continues the reckless handling of forests, practical shape is being given more and more to the opinion not only that such wasteful methods must be superseded by scientific handling of the forests, but also that waste lands should be forested, and that tree-planting in towns and villages has many hygienic and aesthetic advantages. Arbor Day in this country is the complement to wise lumbering, and the importance which it may assume in the future is indicated by the spreading interest in England in the afforestation of waste lands, especially in the coal-mining regions. Thoughtful men of that country are giving special attention to this phase of national economy, and the provincial press is cultivating a public sentiment that may lead to the utilization of unsightly and practically worthless pit-heaps for tree-culture. And the suggestion, which has hardly come to the surface in this country, is there made that the planting of woods and forests may be a profitable undertaking as a form of relief work for the unemployed. This country has not yet had to face a problem of the

unemployed, with which Great Britain has been wrestling for many years, but, taking the cue from certain operations in roadmaking, it may happen that employment for one class of unemployed—the inmates of prisons and reformatories—may be given for enhancing the improvement of public roads under convict labor by insuring shade for those roads.

### AN ARKANSAS BLUNDER.

Reaction against the attempt to bolster through the Southern Education Scheme the theory discredited by forty years' sad experience, that blacks and whites in the South should have like training in the schools, has been strongly manifested in the passage by the lower house of the Arkansas legislature of a bill to separate school taxes paid in the school districts by whites and negroes, and to devote revenues derived from white taxpayers to white schools, and those derived from negro taxpayers to negro schools. There have been stirrings in this line this year in Virginia, North Carolina, Louisiana and other Southern States, but as the proposition has advanced in Arkansas as far as the adoption by one branch of the legislature, it may be interesting, perhaps, to discover the reasons for such action as revealed by Dr. Briant, father of the bill, who indicated that it was an attempt to curtail the negro's education. He argued that "education" of the negro, in the majority of cases, destroys his usefulness, and that he ceases to be a producer; that negro equality with the white is, morally or socially, an iridescent dream; that negro "education" has been a failure, that the negro is incapable of the grand transformation expected of him by the idealist, and that to the whites should be given the use of the taxes paid by them to educate their own and their neighbors' children.

Opposing these propositions it was contended that the bill was unconstitutional in discriminating against the negroes, that it was unwise and unjust, that just as well should a law pass that only persons having children should be taxed to support public schools, that the law would drive away negro labor, that it would be a direct blow at the free-school system, and that it might lead to separating the schools of the rich and the poor.

Here are summarized most of the arguments for and against the proposition to segregate according to races money raised by taxation for the public schools, and they show that the agitation deals only with superficialities in that it confuses education with school facilities. Segregation should be had—not segregation of taxes, but segregation of races in the schools, for the same reason, the radical difference between the races, that there should be segregation in education. The last is the vital fact to be considered, and if properly appreciated and adapted to Southern conditions, it would undoubtedly put an end both to the demand that only

money paid by negroes in taxes shall be used for negro schools and to the absurd assertion that there shall be like training in the schools for blacks and whites. Likewise, the misleading conception that education is something that can be supplied to a person regardless of capacity would be retired to the lumber-room of philosophy.

Granted that it is the duty of the State to direct, provide and pay for the education of all its citizens of both sexes and every race, departure must never be had from the fundamental principle that the means of education must be suited to the individual to be educated. Miseducation may spoil the first-class blacksmith and produce a fourth-class preacher. It certainly will convert possible producers into impossible parasites. It may destroy initiative and train to dependence. All the fad-worship in the world cannot overcome mistakes in elementary training. The attempt to put different races through the same book drill has resulted in failure equaled only by that flowing from the attempt to put different individuals through the same course of study, and from confounding means and ends in education. When the fact has become generally recognized that the negro, for his own good and for the good of the community, requires different means of education from the whites, great advance will have been made toward solving the taxation difficulties. It will be found that the negro does not require either the same means as the whites or more expensive means, but that less costly means will be the best for him; for he is marked for careers, to endure many many generations, requiring simple and elementary training. The mistakes which have already been made with him are valuable in emphasizing a rule which should be universally adopted, that means of education should be provided not per capita of pupils, but per capacity of pupils.

#### A WORD FOR NEW ORLEANS.

In connection with the convention next month of the National Association of Manufacturers at New Orleans Mayor Paul Capdevielle has written for American Industries an interesting review of the progress of that city, and has presented facts showing its importance in the commercial and business world. He notes that during the past year the cash revenues of the post-office were \$571,401.50, and bank clearings were \$672,360,577; that 2,815,599 bales of cotton, 57 per cent. of the whole crop grown in Texas, Mississippi, Arkansas and New Orleans, were handled, and that the value of exports was \$134,486,863. Mayor Capdevielle points out that the location of New Orleans in the very center of the Gulf coast makes it the natural entrepot of more than twenty-six States, with 16,874 miles of interior waterways ramifying through practically the whole Mississippi valley, and that it is the terminus of six great railway systems having a combined mileage of more than 30,000 miles, tapping the most prolific sources of supply in the South and West. To these facts is attributable in great part the steady progress which New Orleans has been making in recent years, but a great impetus has been given by the determination of the combined business interests of the city that the community shall become greater and greater commercially. The mayor points out that the people are taking advantage of the long-recognized facilities for trade, and are spending money in the purpose to

utilize them to the full extent. That the city is a half-way house between Mexico and California makes it of importance in transcontinental travel. To this will be added importance in intercontinental travel and trade when an isthmian canal shall be completed. On this point Mayor Capdevielle says:

Nearer by several hundred miles to the isthmus than any other port, and directly in touch with the remainder of the United States, the terminus of several of the great trunk lines of world communication and the center of a productive territory, agricultural and manufacturing, the advantages of this city are obvious. Proximity alone would justify the selection of New Orleans as the place of residence of the isthmian commission, or at least a part of that important body, and we desire to lay claim to the consideration of the government and of the great leaders in national progress in this regard.

There is a hint in this of the possibility that New Orleans, having, through its aggressive Progressive Union, brought the convention of the National Association of Manufacturers to such a strategic point in international trade, will endeavor to induce the convention to take steps toward hastening the piercing of the isthmus, and the magnifying thereby of New Orleans' prestige.

#### LIGHT UPON "CHILD-LABOR" AGITATION.

Among the many letters seeking information in a wide field and bearing upon a variety of subjects was one which came a day or two ago to the Manufacturers' Record from a resident of a city in the upper part of New York. It contained the following:

I am to write a paper for the leading literary club for women in our city on child labor in mill or mine, and do not know where to find the facts, figures and conditions. Any information as to where I can find material for the paper will be most highly appreciated, and will be used to create sympathy for the children.

The Manufacturers' Record has received a number of letters of the kind, and it may not be amiss, therefore, to reproduce in part the reply made to it, as follows:

We may only suggest that about the best way to gain knowledge of facts, figures and conditions of "child labor in mill or mine" which would be of practical value in philosophic discussion of a problem appealing strongly to our sympathies, is for one to visit the mills or the mines and to have the advantage of observations extending over a number of years.

Naturally, comparatively few of us may enjoy such opportunities for first-hand investigation. Nor may we safely depend for proper guidance upon much of the current literature on the subject produced either for sale upon a sensational basis as a result of superficial knowledge often worse than ignorance, or to further a cause only remotely related to the welfare of the children. Our opinion is that the problem to be considered is not so much the condition of children in the mills, but the condition of children before the mills have given their families the first chance at personal comfort, regular employment, steady wages and the betterment of their material and moral surroundings on the one hand, and, on the other, the condition of children in the sweatshops, in the streets and in the great department stores or in other occupations which are quite as onerous as employment in mills, and much more injurious to health, to manners and to morals. The merest review of the agitation which has been vigorously carried on for the past four or five years against the employment of children in Southern cotton mills in contrast with facts brought to the surface nearly every day by the press of New York, Philadelphia, Chicago and other communities where "child-labor" legislation is of comparative long standing, shifts the question for persons having real concern about the children to the points, why were Southern cotton mills made the object of assault, what have been the results of "child-labor" legislation in other parts of the country, and why should a radically incorrect principle be bolstered by additional legislation.

Discussions of measures now before the

New York assembly might give you a clue to the Peckhamian frame of mind which supported the agitation against the Southern mills, and might clearly reveal the difficulties surrounding the proper study and the desirable solution of this problem.

Many tender hearts have been stirred by the more or less highly-colored pictures of the children in the mills. But it should be remembered that as a rule promotion of the agitation for relief has been either by enthusiastic and sincere, but often misdirected and one-sided, theory, or by the practical self-seeking of organized labor appealing to ill-informed sympathy; that proposed remedies for social diseases are frequently worse than the diseases, and that poverty may not be abolished nor morality created by legislation.

It may be added that, serenely oblivious to the revelations as to the inadequacy of "child-labor" legislation in the quarters in which originated the agitation against Southern industry, Southern legislatures are blindly following each other in passing child-labor laws which can be of service only for the advancement of the propaganda designed to give the small minority of wage-earners represented by Mr. Samuel Gompers and his American Federation of Labor the dictatorship of national, State and municipal government and the absolute control of action by individual Americans.

#### LABOR IN WEST VIRGINIA.

The United Mine Workers will make a very determined effort to organize the West Virginia miners, and it appears that the mine operators are as fully determined that their men shall not be organized and placed under the jurisdiction of the United Mine Workers. The men all over the State are being well paid, by reason of advances that have been made in all of the coal fields, but it appears that it is not now so much a question of wages of the men, but of recognition of the order.

The operators increased the miners' wages on January 1 13 1/4 per cent., and all other labor was given a substantial increase. Organizers from other States are now in this section—some of the old crowd that was there the past year, and who have not left, and some new recruits. The men seem to be satisfied in every respect, and if left alone they will hardly strike. In all coal fields there are three kinds of miners—the one who is always ready to go on strike, the fellow on the fence, and the loyal, sensible, thinking one. The United Mine Workers is up against a harder proposition in West Virginia than it was in the Pennsylvania coal regions. The Pocahontas operators are arranging for armed protection for their men, and will endeavor to keep coal moving at all hazards, offering more than the usual amount of work for those who are satisfied to remain in their places of employment. With this policy clearly outlined in advance, it is hoped that a very large proportion of the men will remain loyal, and that the operators will be able to supply a considerable percentage of the usual output of the region.

Within the past few days a phase of this movement has developed in rumors of an intention on the part of the United Mine Workers of America to place a boycott in certain markets on coal which is the product of non-union mines in Maryland and in West Virginia, the first effort in this direction being had at cities where bids are now being asked for public supplies. The authorities are asked not to grant contracts to shippers of coal from these States where non-union labor is employed. It is a mighty strong effort on the part of labor to press its claims for recognition so far as this, and it is in-

deed very doubtful if such a movement could be successful. Would any of the city authorities be acting within their constituted rights in rejecting bids on such coal, particularly if these bids were at figures below those of bidders of equal grades of fuel? Would not the mayor of any city be subject to impeachment if he stepped so far aside from the law as to reject a bid for supplying coal simply because it were "non-union?"

#### SUPPRESSION OF SOCIALISM.

"There will be no danger from socialism in this country if the people are rightly instructed," says the New York Mail and Express, referring to a reported organization at Washington to combat certain un-American propaganda now being supported with a vociferousness in inverse proportion to the number of persons supporting them. It says that plain, simple education as to facts and principles is wanted, and it offers the following as a practical illustration of the plan to be followed:

The last national census showed that the value of all the manufactured products in the United States in 1900 was about \$13,000,000,000, and that the products of the farm were worth \$3,800,000,000 more. Adding the value of other productions, the total value of all products in the United States can be placed at \$18,000,000,000, or about \$225 for each man, woman and child in the country. For a family of four this would mean an income of \$900 a year. So that every head of a household who is receiving this salary, and there are thousands of them, is getting his share if there were an equal division according to population of all the products of the country. Such simple facts as these can be made to combat a whole column of demagogic vaporings.

If this is the plan to be adopted, we fear that demagogic vaporings will not be dissipated very rapidly. It is but another form of the veteran per capita, a valuable medium for enforcing certain statistical facts, but rather likely to end in absurdity if used, as the Mail and Express suggests, to prove to individuals how well off they are. Everybody knows that the wealth of the country is not distributed per capita, and everybody knows that as long as human nature remains as it has been for thousands of years there will always be an inequality in amount in the distribution of wealth. Demagogic vaporings do not appeal to the man who knows that he is in comparative comfort, nor does practical socialism appeal to the mind sufficiently well balanced to recognize fundamental social truths. To the opposites of these two classes the statement that everybody would be getting his share of wealth "if there were an equal division according to population of all the products of the country" would be but encouragement to persist in their dreaming.

#### IS IT A HOODOO?

Reviewing efforts to secure the passage of the eight-hour bill, a "labor organ" states that in the extra session of the Fifty-fifth Congress Senator Kyle interested himself in the eight-hour measure, which was sidetracked by an appropriation bill; that in the Fifty-sixth Congress Senator Allen tried to draw a similar measure from a Senate committee, and that later Senator Pettigrew endeavored to resurrect it. The misfortunes of the bill were paralleled by the misfortunes of its advocates in passing from legislative careers. At the New Orleans convention of the American Federation of Labor, the sponsor of this eight-hour bill, there was an attempt to create an impression that it would be dangerous for statesmen to oppose the Federation's



schemes. The fate of the eight-hour bill in other Congresses indicates that it is rather dangerous for statesmen to advocate such schemes. To be sure, there may be no connection between such advocacy and retirement to private life, but it would be a pity if that were not so.

#### SATISFYING THE PUBLIC.

A special correspondent at Austin, Texas, of the Galveston News finds in the legislation an inclination to go slow in the matter of laws affecting combinations or aggregations of capital, lest the material development of the State be hampered. He finds that many legislators feel it necessary to do something in the way of anti-trust legislation, because of their parties' platform demands, but he notes with apparent approval the fact that the frank statement of Governor Lanham in his message, that most of the efforts at trust legislation in the past seem to have been made for the purpose of satisfying the public rather than with any serious intent to interfere with trusts, has been taken as a warning that whatever the legislature may do in this particular should be done earnestly and honestly. Whether this view of the Texas legislature will hold good to this end remains to be seen, for there have been indications of a tendency to "satisfy the public." Still the indications may not pan out, and Texas may come through its legislative session with little done to counteract the excellent impressions about the State's resources gained recently by capitalists traveling through the State.

#### TAXING TO ADVERTISE.

The general assembly of North Carolina passed last week what is said to be the first law enacted in that State allowing a town to vote a regular tax for the purpose of paying for an advertisement of itself. The bill was passed at the request of more than two-thirds of the voters of Pine Bluff, a community controlled almost entirely by New England capital, and the tax, which is to be laid upon every form of business, is greater than the tax for any other purpose. This bill is a novelty, but it is but another form of the policy which is becoming more and more generally adopted in the South of spending money to call general attention to the advantages of cities, towns and country localities. The deep interest manifested in the South by would-be investors and settlers is responsible largely for this quickening toward publicity, and, judiciously directed, the advertising will result in magnificent material returns.

In a letter to the Manufacturers' Record David Boaz of Fort Worth, Texas, writes:

Will you please enter my name as a subscriber to the Manufacturers' Record. I cannot get along without it. It has continued to keep before the business and investing world the advantages and resources of the South as a most inviting field for new enterprises.

#### The National Engine Co.

In its issue of March 5 the Manufacturers' Record referred to and illustrated the engine built by the National Engine Co. of Rockford, Ill. This type of engine is meeting with success, especially in connection with electric-lighting plants, for which it is almost exclusively built. In mentioning the company last week its location was erroneously given as Rockport, Ill., which should have been Rockford, Ill., where communications should be addressed.

#### IN CHEERFUL EXPECTATION.

##### Comfortable Feeling in the Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., March 9.

While no one can tell exactly why, there is general tenor of cheerful expectation in the iron and steel market that is encouraging, and not a few believe that the buying for the last half of the year will soon open in large volume. Inquiries have been coming in generously for the past ten days, and while sales made were small, and not especially frequent, enough contracts were entered into to care for surplus irons lying around loose. No. 2 foundry is on a basis of the minimum \$18.50 where it can be had, and not a ton is being stored because of inability to secure sales for it. A peculiar feature of the market is that Birmingham seems to be getting a better price by fifty cents on the ton than Nashville. A furnaceman of that city was here today and said that their price was on a basis of \$18 at Birmingham for No. 2 foundry. It does not seem that any local dealers are selling at that price. Two rules to the question are thus presented. The furnacemen are willing to wait, and have business enough ahead to do so, feeling sure that the consumers will be obliged to get into buying before very much longer. On the other hand, the consumers have sized it up this way: The summer is coming, when furnaces make the maximum of iron, because of excellent physical conditions and plentiful supply of raw material, and the foundries and rolling mills take it easier, often stopping for several weeks. These will add to the supply of iron and decrease the consumption, all of which will have a tendency to reduce the price. But the maker then points to the fact that he is comfortably sold to July 1, with prospects of all the laggard buyers being out of supplies by that time, and a "rush to cover" when one break is made. Many believe, and they are conservative, too, that by the time spring opens in good shape there will be such a rush to buy that prices will be sent back to figures which prevailed some months ago.

The prospects for a heavy summer production are good. Most all the furnaces in the district are in blast, and there will be a strenuous effort to keep them so. One furnace will be out at Ensley pretty much all the time while they are being rebuilt, and maybe one at Bessemer, but the balance of those belonging to the Tennessee Company promise to keep going. Sloss-Sheffield has seven which will likely go all the year, while the Alabama Consolidated will have a new one to go in before many more days. All these things indicate that the production is going to be very heavy.

The rolling mills are doing very well, though much of their output is being stored.

The pipe plants report increasing business and good prices. H. W. L.

#### IN SOUTHEAST KENTUCKY.

##### Activity in Developing Coal Fields and Other Resources.

[Special Cor. Manufacturers' Record.]  
Barboursville, Ky., March 9.

At no other time since the opening up of the great coal deposits along the borders of Southeastern Kentucky and Virginia has such general activity and widespread interest been manifested as now.

For a number of years past development has progressed but slowly. Markets were hard to obtain. Owing to the inaccessibility of the country the natural resources, rich beyond the expectations even of those who were most in touch with the situation, have remained in an undeveloped state, because men of money hesi-

tated to put their money in a venture which seemed to them to be doubtful. But now a change is taking place. Capitalists are beginning to awaken to the realization that, with proper development, this region is destined to become one of the richest coal fields in the world, and roads are being built to the coal fields, mines are being opened up on all sides, and the country that has heretofore remained in a state of lethargy on account of not being presented in a proper light is beginning to attract capital from all parts of the Union.

Recent tests of the country around the headwaters of Cumberland river and tributaries have revealed some of the richest deposits of cannel and bituminous coal in the world, easily mined and inexhaustible in quantity. The country in this section is very mountainous. The Pine and Cumberland mountains extend through the region in almost unbroken crests, and in some parts, from the base to the height of the mountain, there are five seams of coal, all easy of access and thick enough to make the mining profitable. In some places cannel coal has been found in veins forty-nine inches in thickness, while seams of bituminous coal have been found six feet thick.

The first problem to confront the operators was the building of a railroad through this country and obtaining an outlet for the production. This problem has now been solved. The waters of Cumberland river extend through the tested parts in a winding stream, and along the course of this stream a road has now been mapped out and surveyed. This road will commence at Middlesboro, near the meeting point of Kentucky, Tennessee and Virginia, and will terminate at Harlan, the county-seat of Harlan county. Maps showing the route of the road have now been filed at Pineville, the county-seat of Bell county, and active work will be begun at once. The right of way will be secured, fair prices being paid, and when condemnation measures are necessary they will be used.

This road will extend down the eastern bank of Yellow creek to its junction with Cumberland river, and thence will proceed on a direct line with the river to Harlan, crossing Martin's fork just south of that town, and, swinging around, will go up the valley of Clover fork. This makes a very crooked road, but tunneling will be unnecessary, and there will be no grades worth mentioning, as there will be a gradual rise which will allow heavy trains perfect safety and good facility.

Middlesboro is now the seat of the greatest activity. This is a town of about 3000 population, and is the center of the vast coal country around the meeting point of the States of Kentucky, Tennessee and Virginia. About fifteen companies are domiciled here, and almost every week witnesses the formation of a new one. The older companies are making improvements in their plants, and the outputs of each company is constantly on the increase. Most of them are using the latest improved machinery, and mining is rendered easy. From Middlesboro what is known as the Belt Line extends through the present coal development and takes the output. But the opening up of new territory makes further extensions a necessity.

The region known as Stony Fork is probably the richest of the new sections to be entered. The Fork Ridge Coal & Coke Co. is now engaged in building two miles of railway into the mountains, and it is the intention of this company to open up three new mines. On Stony fork three veins of coal are found. In addition to this company, several others are now opening up new mines. The Stony Fork

Coal & Coke Co., which was recently organized, is preparing to operate on an extensive scale, and work will be commenced at once in the new territory. The Nicholson, Mingo and Yellow Creek companies, which have been in the field longer than the others, are preparing to open up new mines. During the past few weeks a dozen new companies have been organized. The Sagamore Coal Co. has now opened up a new mine, and the railroad extension will soon be completed to this opening. It is the opinion of Superintendent Hollingsworth of the Louisville & Nashville's Cumberland Valley division that before long at least 400 carloads of coal will be passing over the road daily. The product is mostly marketed in Kentucky.

Great activity is also being manifested in Knox county. A number of new mines have been opened, and roads to undeveloped sections are being projected. The Cumberland Valley division of the Louisville & Nashville extends through this county, and numerous mines have been opened up along this road, a tippie being the only necessary equipment. Among the new mines may be mentioned that of the Hughes-Jellico Coal Co. This company now has an initial production of 400 tons daily, and employs 150 miners. The vein being worked is four and one-half feet thick, with eight inches of cannel. One of the most up-to-date of the new mines in the entire State is that belonging to the North Jellico Coal Co. at Wilton. The mine is reached by a five-mile branch road. The equipments are the latest, electricity being the motive power, and a large number of machines being used. The houses are built on a good scale, lighted by electricity, and the company has a fine three-story commissary. The town is situated in a broad valley, surrounded by rugged mountains, and where a year ago there was a barren tract there is now a thriving town of 800 population. No intoxicating drinks are allowed within the town limits, and no dispute has ever occurred between employers and employees.

Among the new mines projected will be some in the Poplar Creek territory, to which a road has now been surveyed. This road will extend up the valley of the creek, and will be ten miles in extent, with terminals at Lunsford, a point in the coal region. The deposits in that section are very valuable; besides, the road passes through rich timber lands, and the country is a probable location for oil wells. Pennsylvania capitalists, among whom is Ex-Lieutenant-Governor Stone, are at the head of this movement.

All in all, it may safely be said that the rapidity with which work is now advancing has been exceeded by that in no other coal field in the first stages of development, and the work under way at present, together with work planned for the future, will unite to make this country, which has for so long a time been dead to its surroundings, one of the richest coal fields yet developed in the entire country. Railroad facilities, the lack of which has served as an impediment, will now reach all sections, growing industries will furnish a better market for the output, and into the country will flow a stream of wealth which has heretofore never been conceived. W. S. HUDSON.

Mr. C. B. Carter of Knoxville, Tenn., secretary-treasurer of the Southern Supply and Machinery Dealers' Association, is making arrangements for reduced railroad rates on account of the second annual convention of the association, which will be held at New Orleans on the 8th, 9th and 10th of April. The headquarters of the convention will be at the New St. Charles Hotel.

## IMPORTANCE OF COAL.

### Increasing Demand for This Basis of Industry.

The coal industry is really a basis of all prosperity in the country. The main facts as they are presented today, particularly by a few comparative figures of our country with others, show how vast and important this crude material is. No other country on the globe is doing the tonnage that we are doing in the United States; no other country has such vast resources as this country. Our nearest competitor—Great Britain—originally had 12,000 square miles of coal, while West Virginia has 17,000 square miles, of which the surface has hardly been scratched. One might readily be charged with optimism, but I make here the prediction that at the end of five years' time the annual output in this country will very closely approach 400,000,000 tons of bituminous coal alone. There will be over 60,000,000 tons of anthracite to be added to this if there be anything like present ratio of growth carried on for that period.

The railway coal requirements of this country are growing at a rapid pace—put the average annual consumption at 2100 tons per engine. As there are a few more than 40,000 bituminous-burning locomotives in the United States and Canada, this means that the railroads are using "on the road" alone about 85,000,000 tons of coal a year. The coal for shops, pumping stations, heating, etc., as well as for tugs and ferryboats, will swell the total to nearly, if not quite, 100,000,000 tons a year.

Now for a few comparisons with other countries, the returns for which, covering last year, are now coming in. The United States still leads all other countries in the production of coal, as in many other things. Reports show that Germany last year produced 107,000,000 tons of coal and 43,000,000 tons of lignite—a total of about 150,000,000 tons, or equal to the output of soft coal in Pennsylvania and Illinois last year. France produced 30,000,000 tons of coal of all grades last year, or an amount about equal to the tonnage of the States of Ohio and Alabama. Great Britain did about 220,000,000 tons, or perhaps twice as much as the output of Pennsylvania in its bituminous coal alone, but she exported about 60,000,000 tons of this total to various parts of the world, so that her home consumption is not so great proportionately as ours. Russia is put down for 16,000,000 tons last year, or about on an equality with the production of Indiana and Kentucky. And so one may wander all over Europe until one comes to Belgium, a country heard of now and again as an important business center, and yet Belgium produced but 22,500,000 tons of coal last year, imported 3,250,000 tons and exported 5,000,000 tons, so that her home consumption was about 20,000,000 tons, or not as great as that of the State of West Virginia, and say twice as much as the business of one of the coal-producing concerns having its headquarters in Baltimore. The recently-compacted Watson coal interests will run out 10,000,000 tons this year.

F. E. SAWARD.

### The American Pig-Iron Output.

From the full returns compiled by the American Iron and Steel Association, which have just reached this country, it appears that the United States production of pig-iron during 1902 was 17,821,000 gross tons, compared with 15,878,000 gross tons in 1901, an increase of about 12.2 per cent., which has been achieved despite the great difficulties brought about by the fuel famine due to the great coal

strike and by the want of freight cars, arising from the fact that the enormous development of inland traffic rendered the available means of transportation wholly inadequate. What the production would have been had the wheels of industry not been clogged in this way it is impossible to say, but obviously the increase of 2,000,000 tons which actually took place would have been largely exceeded. In spite of all drawbacks, the United States in 1902 made more pig-iron than did Great Britain, Germany and Belgium put together, yet such was the buoyancy of the American home consumption that large quantities of pig-iron and steel had to be purchased in Europe to supplement the insufficient domestic supplies. We have cause for thankfulness at this, for the demands made upon the European markets by the States were of real assistance in maintaining prices on this side at a point approaching remunerativeness. Had it not been for these American demands, the position of the iron trade in Germany, already serious, would undoubtedly have been rendered increasingly difficult, and might have been followed by a financial crisis which would have shaken the credit of that country to its foundations. The striking fact is that the United States not only produced about 2,000,000 tons more iron in 1902 than in 1901, but that it consumed them and about 1,000,000 tons of foreign pig-iron and steel as well. It follows that the consumption in the States must have been at the rate of about 19,500,000 tons of pig-iron a year, so that there would seem to be plenty of room for a further considerable growth of production in the United States (enormous as the consumption already is) before its home demands are satisfied. In fact, it is safe to say that the United States at the present moment has a consumptive capacity at the rate of fully 20,000,000 tons of pig-iron a year, and possibly even more, so that its output must grow a good deal before there will be a surplus of American material available for export. Latterly the tendency of the American iron markets has been rather dull, but manufacturers appear to have a very good show of orders on their books, and with the opening of the spring trade it is reasonable to expect a continuance of that activity which has been so remarkable a feature during the past year of North American trade. For the first time since 1889 the American Pig-Iron Storage Warrant Co. held no pig-iron whatever in any of its yards on December 31 last, while the stocks of pig-iron which were unsold in the hands of manufacturers, or which were under their control and were not intended for their own consumption, amounted at the same date to about 50,000 tons, against 70,000 tons at the end of 1901. Consumption, therefore, is dependent upon current production. There may be a bad break ahead, but there are no clear indications that it is near.—London Iron Monger.

## VALUE OF OIL FIELDS.

### Activities of the Standard Oil Co. as a Gauge.

Referring to the plans of the Standard Oil Co. to become a producer in the Far East, the Petroleum Review of London says:

"The activity of the Standard Company of the United States is a phenomenon of modern trade and industry. What may be termed the intelligence department of this great concern is, we presume, one of the most perfect that has ever been organized in any branch of human activity. From East to West there is little that occurs that does not come within the ken of

the Standard Company. To many it is as much a bogey as was the name of Napoleon to the nations of Europe in his day. The Standard Company has, in addition to the vast resources from which it can draw its supplies, vast organizations connected with the handling and transporting of the oil, and unless it keeps all these continuously employed it means a loss on capital expenditure. It is therefore one of the chief necessities of the Standard Company that it should insure a sufficient and enduring supply of oil to prevent any part of its wonderful organization from going out of use. This ever must be its first and foremost consideration, and this has been the explanation of the efforts which have been made by it to get a foothold, first, in the Roumanian producing industry, then in the Indian fields, while recently it has turned its attention to the Galician fields. The Standard Company's interests are not confined alone to Europe or Asia or Australasia. Its interests are world-wide, and therefore its supply must be such that it will meet a world-wide demand. It was a bold and admirable scheme, that of seeking to become a producer in the Far Eastern fields in order to check the advance of Russian oil. It was a conception on a grand scale, that of seeking to lay a guiding hand on the development of the Roumanian fields. It is just as fine a scheme to obtain a controlling interest in the Galician fields, which we reported in our last issue, and which is repeated by a number of our contemporaries. There is no symptom which escapes the notice of the Standard Company's representatives; there is no scheme too ambitious for it to strive after. Repulsed in one quarter, it reappears in another, and generally finds a way out of its difficulties. We only wish that other concerns viewed matters in the same broad light as does this ubiquitous American company.

"And the Standard has left behind it not the trail of the serpent in these various endeavors. It has marked the oil fields, which it has done its best to secure, with a sign of merit and approval. They have been worthy the company's money and efforts to secure. They must be, therefore, of great and prospective value. Prospective it must be, because as yet the several fields are comparatively undeveloped, and made for themselves little places in the markets of the world. Therefore, great as was the outcry against the Standard in Roumania, this country should be grateful that its value has been marked and that it has a fine future before it, provided it is properly worked. But the Standard Company did not intend to burn its fingers in Galicia as it did in Roumania, and therefore it has adopted a different manner of approaching the question, although rumors attribute to the American company the desire to obtain a controlling influence in the Galician fields. The Standard is not oblivious of the position of the American oil-producing industry, and its various attempts provides a confirmation of what was referred to by a writer in our last issue as to the decline of the American fields producing a high-grade illuminating oil.

"Galicia has thus been marked out as a coming field, and if rumor is correct Roumania will have to look to its laurels in the European markets."

Mr. George M. Shriver has been appointed to the position of assistant to the president of the Baltimore & Ohio Railroad. Mr. Shriver has been secretary to the president for some years, having served under Charles F. Mayer, John K. Cowen and the present incumbent, Mr. L. F. Loree.

## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### BRUNSWICK & BIRMINGHAM.

#### An Extension Reported Between Nicholls and Broxton.

A dispatch from Broxton, Ga., reports that the Brunswick & Birmingham Railroad is building an extension from Nicholls to Broxton, eighteen miles, and has already laid thirteen miles of track. This extension is being built, according to the report, over the right of way of the Southern Pine Railway & Lumber Co., which operated a railroad near Broxton until the early part of last year, when the track was taken up and the right of way sold to the Brunswick & Birmingham. It is stated that a heavy track is being constructed.

The Brunswick & Birmingham some time ago arranged to operate its trains from Nicholls to Wrays over the Atlantic & Birmingham, but the extension to Broxton is taken to mean that it will build from Broxton to Wrays, and thus make its own line all the way from Brunswick to Irwinville, the company having, according to a recent report, purchased the Ocilla & Irwinville Railway.

From Irwinville the Brunswick & Birmingham will, it is reported, immediately build as far as the Georgia Southern & Florida Railroad, beyond which point it is expected to go via Leesburg and Dawson to Eufaula, Ala. From Eufaula it is expected that the line will be via Blocton and Bessemer to Birmingham. According to reports, it will be possible to construct the road with easy grades.

### Pennsylvania's Great Work.

The stockholders of the Pennsylvania Railroad Co. at their annual meeting have approved the recommendation of the directors to issue \$150,000,000 of new stock, making the total authorized capital of the company \$400,000,000. The stockholders also authorized an increase of \$50,000,000 in the bonded debt.

Capt. J. P. Green, the vice-president, stated that betterments in the Pittsburgh district alone would involve the expenditure of \$10,000,000; also that the entire Pittsburgh division is to be four-tracked. He further said that the company must build a new road from the summit of the mountain down the Juniata valley, and a new road practically from Harrisburg to Philadelphia. The coal traffic is so enormous that it must be kept out of the way of the passenger traffic.

Mr. Green also said that for the first time in its history the Pennsylvania Railroad was unable to meet the demands made upon it by increasing business. During the last two years the company had purchased one locomotive each day and a total of 40,000 freight cars.

### Atlanta's New Depot.

The Atlanta Terminal Co. of Atlanta, Ga., James W. English, president, is having competitive plans prepared for the proposed new union depot, the cost of which is not to exceed \$500,000, although the entire terminal improvement is expected to cost about \$1,500,000. The depot is to be located at or near the northwest corner of Mitchell and Madison streets in Atlanta, and the new depot, tracks and yards will cover about 630,000 square feet of space, more than three times as much as the land occupied by the present union depot and yards. The general waiting-room for white people will cover not less than 7500 square feet of space, and the waiting-room for colored people not less than 4000 square feet; each will have a lunchroom attached. There



will be a baggage-room with 5000 square feet of space, an express-room covering 18,000 square feet, and a mailroom 7000 square feet. The strictly local passenger business is stated to be about 3000 out per day. The entire building will be fire-proof.

### MEMPHIS TO PENSACOLA.

#### Plan to Build a Line With a Branch to Mobile.

The incorporation of the Memphis & Gulf Railroad has been approved by the governor of Mississippi. The company proposes to build a line from Memphis, Tenn., to Pensacola, Fla., with a branch to Mobile, Ala., about 400 miles. According to a dispatch from Jackson, Miss., the line will enter that State at about the middle of the northern boundary line of DeSoto county, and will leave it on the eastern border near the line dividing Clarke and Wayne counties.

The incorporators are Chester S. Pond of Moorhead, Miss.; Oliver H. F. Cornell, Charles H. Blair and Alexander S. Lyman of New York and L. W. Moen of Newark, N. J.

### An Australian Project.

Proposals are being sought for the construction of a line of railway in Australia 1063 miles long between Odnadatta and Pine Creek to complete the Adelaide-Port Darwin transcontinental line. The road is to be three feet six inches gauge, with 60-pound steel rails, and bids, which must be addressed to the commissioners of railways at Adelaide, must be in by May 2, 1904. Specifications can be seen and forms for proposals may be obtained at the office of the agent general for South Australia in London, and copies of these have been forwarded by the foreign consuls in Australia to their respective governments for public information.

The North Australian League, 452 Collins street, Melbourne, states that it is ready to assist bona fide bidders in the collection of information and statistics about the proposed railway.

### Missouri Pacific Report.

The twenty-second annual report of the Missouri Pacific Railway shows that the company is operating 5648.56 miles of line. The gross earnings for 1902 were \$37,495,687, the operating expenses \$25,043,190, and the net earnings \$12,452,496. The net income was \$13,190,294, and the surplus, after paying interest and dividends, \$2,689,512. Out of the surplus appropriation has been made as follows: For additional property and improvements, \$1,615,871; for improvement funds to pay in part for improvements to road and equipment for 1903, \$1,000,000. Since January 1 the net income has been further increased by \$1,113,800, or 5 per cent. interest on the Texas & Pacific second mortgage bonds owned by the St. Louis, Iron Mountain & Southern Railway.

### Russellville to Dover.

Mr. W. A. Bird, one of the incorporators of the line, writes to the Manufacturers' Record from Russellville, Ark., stating that the proposed Russellville & Dover Railroad will be ten miles long, terminating at Dover. At Russellville it will connect with the Little Rock & Fort Smith Railway. The country through which the line will run is level, and contains fine coal, some of which is developed; there is also pine and other excellent timbers. The agricultural resources of the country are varied.

### Columbus to the Gulf.

The Birmingham, Columbus & St. Andrews Railroad has been incorporated in Alabama to build from Columbus, Ga.,

along the Chattahoochee river through Alabama to the Gulf of Mexico at St. Andrews, Fla. The officers are: President, W. Miller Gordon; vice-president, James B. Huff; secretary, Donald B. Jones. The stockholders are the officers and W. O. Butler, W. A. Hawkins, R. L. McKenzie, Dozier Pou, B. Thatcher, C. J. Moore and Orville G. Wales.

### RAILROAD TO SOUTHPORT.

#### Work Begun on the Southport, Wilmington & Durham Line.

Advices from Southport, N. C., report that the Southport, Wilmington & Durham Railroad Co., which was chartered two years ago, has begun work on its proposed line at Southport. The charter provides for a line from Durham via Sanford, Fayetteville and Wilmington to Southport, a total distance of about 180 miles, and the incorporators are W. A. Guthrie, W. B. Guthrie and Thomas L. Peay of Durham. It required that work should begin within two years. The contractor is Horace G. Williams of Philadelphia, and Clifford C. Pullen, the engineer in charge, is reported as saying that more men may be put on the work.

### New Equipment.

Among the recently-reported orders for equipment are the following:

Southern Railway, 200 engines, 3000 freight and coal cars and 50 passenger cars.

International & Great Northern Railroad, 22 engines, 3 dining cars.

Norfolk & Western Railway, 100 engines, 5500 freight cars, 25 passenger cars.

Texas & Pacific Railway, 22 engines. This company also proposes to build 300 stock cars, in addition to a large number of flat cars which it is now constructing.

Brunswick & Birmingham Railroad, 6 engines.

Texas Southern Railway, 1 engine and 125 freight cars.

Louisville & Nashville Railroad, 3000 freight cars. It is also building at its own shops about 18 cars per day.

Illinois Central, 500 freight cars.

Queen & Crescent, 18 engines and 100 freight cars.

Nashville, Chattanooga & St. Louis—the company is now building 500 freight cars at its own shop, and will, it is reported, in April start upon another lot of 500.

Kansas City Southern, 250 engines.

Mexican Central, 35 engines.

Fort Smith & Western, 250 coal cars.

Atlanta & West Point, 70 freight cars.

The Georgia Car Works at Savannah, Ga., which recently completed a large order of freight cars for the Atlantic Coast Line, is now working on an order of box cars for the Georgia Southern & Florida Railway.

The Nashville, Chattanooga & St. Louis Railway will, it is reported, soon order 250 coal cars.

The Louisville & Nashville Railroad Co. has ordered 75 locomotives for delivery in July, August and September.

### Railroad Notes.

A dispatch from Sarasota, Fla., says that the Seaboard Air Line has begun to operate passenger trains to that place over its new extension from Tampa.

Major J. G. Pangborn has been appointed by the Baltimore & Ohio Railroad Co. to prepare its exhibit for the World's Fair at St. Louis next year, where the company has secured 60,000 square feet of space. He prepared and installed the great exhibit of the Baltimore & Ohio Railroad at the Chicago Exposition in 1893.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

### The Dan River Mills.

Contract was awarded last week at Danville, Va., in connection with one of the largest and most important Southern cotton-manufacturing enterprises ever projected. This is the project, heretofore announced, of Dan River Power & Manufacturing Co. to build two mills of 40,000 spindles and 1200 looms each. George B. Hinman, Atlanta, Ga., received the contract referred to. His contract calls for the erection of a mill building 130x547 feet, with tooth roof, which affords the best possible advantages in securing natural light; also calls for erection of a clothhouse 75x200 feet, three stories high. The plant will be operated by electricity through power secured from dam now under construction. It will also have its own water supply for dyeing, fire protection and other purposes. Wm. G. Fitzgerald of Danville received contract to erect ten of the 200 operatives' cottages that will be required. Messrs. Lockwood, Greene & Co. of Boston, Mass., are furnishing plans and specifications, and their chief engineer, Frank E. Shedd, is in charge of the developments. Denims will be the product. About \$2,000,000 will be invested in this enterprise. R. A. Schofield is treasurer of the company, and of Riverside Cotton Mills of Danville.

### Lockhart Mills' Additions.

Lockhart (S. C.) Mills' stockholders will meet April 16 to ratify action of the directors in resolving to increase capital stock from \$650,000 to \$1,300,000. This meeting will be mere formal routine. In its issue of December 18 the Manufacturers' Record mentioned the enlargements which this increased capital is to pay for, namely, the erection of a No. 2 mill, planned for 50,000 spindles and 1500 looms. Only 25,000 spindles and 750 looms will be installed upon the completion of the main structure. The other machinery will be installed after the first half of the equipment is in successful operation. The company is proceeding with the work involved in these extensive betterments. It has contracted for all the machinery, secured brick for the building, which will be a five-story structure 130x450 feet, and the latter is now in progress of erection. A complete water-works system requiring a 200,000-gallon reservoir and a steel bridge across Broad river will also be constructed. This new mill will employ about 600 people. The original Lockhart plant has 25,000 spindles and 800 looms.

### Doubling a \$450,000 Mill.

The Monaghan Mills of Greenville, S. C., will double its extensive plant. The directors and stockholders of the company have authorized the improvements, and will push them to completion this year. The present installation of textile machinery is 30,000 spindles and 760 looms, which will be duplicated in the extension to be erected. The character of product will continue to be the same, namely, wide print cloths and wide sheetings for conversion. J. F. Grandy & Son have contract to erect the mill extension, under agreement to complete it by August 15. All the machinery has been purchased.

The company's present capitalization of \$450,000 will be about doubled. J. E. Sirrine of Greenville is the engineer in charge.

### Worsted Mill Enlarging.

Hope Worsted Mills, Louisville, Ky., will erect another building for its plant. Plans and specifications have been received, and they call for a three-story structure 80x200 feet in size. About \$50,000 will be the cost. Contract for construction will be awarded soon. The company will remove its present equipment of machinery to this building and install additional apparatus, increasing the number of operatives from 300 to 400. Its present equipment is 5760 spindles, seven sets, six combs, etc., manufacturing worsted yarns by the English system.

### Maple Cotton Mills.

Announcement was made last week as to the organization of the Hamer Cotton Mills at Dillon, S. C. The company has since decided that its plant will be equipped with 5000 spindles. Its product will be yarn, daily output to be about 3000 pounds, and 150 operatives will be employed. As soon as plans and specifications have been completed bids on furnishing the machinery will be wanted. Wm. M. Hamer is treasurer. He is president of Maple Cotton Mills, reported last week, and which is also to have 5000 spindles.

### \$100,000 Mill at Hickory, N. C.

Brief reference was made last week to the fact that Messrs. A. A. Shuford, Geo. F. Ivey, G. H. Geitner and associates are organizing a cotton-mill company. They have now completed all preliminaries, and will file articles of incorporation as the Ivey Mills, with capital stock of \$100,000. A. A. Shuford will be elected president, and Geo. F. Ivey, general manager. It has been decided that the equipment will be 5000 spindles and 200 wide looms. No contracts have been awarded as yet.

### The Cotton Movement.

In his report for March 6 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 187 days of the present season was 9,044,820 bales, an increase over the same period last year of 137,292 bales; the exports were 5,244,517 bales, an increase of 17,960; takings by Northern spinners 1,606,749 bales, a decrease of 29,546; by Southern spinners 1,247,439 bales, an increase of 133,872 bales.

### Textile Notes.

It is proposed to build a knitting mill at Clinton, S. C., and P. S. Bailey is interested.

Whitney (S. C.) Manufacturing Co. has declared an extra dividend of 1½ per cent. Its regular dividend is a semi-annual of 3 per cent.

R. B. Spencer of Dublin, Texas, is corresponding with Galveston (Texas) parties relative to the erection of a large cotton mill at Dublin.

G. C. McEachern, Piedmont, S. C., contemplates establishing a knitting mill. He wants information regarding the knitting industry, prices on machinery, etc.

It is proposed to establish a cotton factory at Bucatunna, Miss. M. A. Hooge, one of the town's merchants, offers to donate ten acres of land as site for the enterprise.

Messrs. M. Heiman, H. M. Rimmel, John G. Fletcher and others of Little Rock, Ark., propose the establishment of a \$250,000 cotton mill. Their plan is to secure \$150,000 at Little Rock and \$100,000 from outside capitalists.

Messrs. Ely Walker & Co., dry goods merchants, of St. Louis, Mo., will establish at Tupelo, Miss., the knitting mill mentioned last month as proposed by them. About \$50,000 will be invested to start with. The product will be hosiery.

Messrs. W. L. Welcker, Henry Hudson, John F. Edington, J. G. Johnson and Leon Jousolmon have incorporated the Southern Textile Co. of Knoxville, Tenn., for manufacturing cotton, flax, hemp, etc. The capital stock is \$10,000. No further details stated.

J. H. Ruebush, Dayton, Va., contemplates installing machinery for the manufacture of hosiery or underwear. He merely wants to install a small number of machines in order to utilize surplus power. Prices and other information are requested on the required machinery.

Avon Mills, Gastonia, N. C., was damaged only about \$3000 worth by the wind-storm referred to last week. Repairs to the building are already about completed. Stuart W. Cramer, Charlotte, N. C., is engineer in charge to furnish parts for the damaged machinery. About 10,080 spindles and 300 looms are operated.

Park Woolen Mills, Rossville, Ga., manufacturer of jeans and cassimeres, will enlarge and improve its plant. Company will erect additional building under its own supervision, of brick, 50 feet wide by 270 feet long, suitable for storage and for operating 180 looms. It is in the market for eighty narrow looms, three sets 60-inch cards and three pairs mules.

Extract Wool Merino Co. of Chattanooga, Tenn., reported last month as to increase capital from \$20,000 to \$40,000, has taken this action. It will erect an additional building three stories high and install new machinery to about double present capacity. Its product is shoddy (wool secured from old rags and cloth containing both wool and cotton).

York Cotton Mills, Yorkville, S. C., has contracted for the combing machinery for its additional building mentioned last week. This machinery has been purchased from Whitin Machine Works, Whitinsville, Mass., through Stuart W. Cramer, mill engineer, Charlotte, N. C. The additional building is a two-story structure 54x80 feet. There are 20,264 spindles in this mill.

Wright Willingham and associates last week bid in the Rome (Ga.) Cotton Factory at the upset price of \$30,000. A previous sale of this plant several weeks ago was not confirmed by the courts because of the inadequate price offered. The enterprise includes 5100 spindles, 300 looms, six acres of land, electric-light plant and other equipment, making the plant a modern one. The new owners will make some improvements.

Subscription books have been opened at Union, S. C., for Union Manufacturing & Power Co. The enterprise was mentioned February 26 as proposing to develop 10,000 horse-power from Neals Shoals, near Union. Thomas C. Duncan was named as the projector. Messrs. A. S. Wattles, Geo. H. Bayne, Geo. M. Wright, L. G. Young and Mr. Duncan are the incorporators. Permanent organization is expected to be effected soon.

Steele's Cotton Mills of Mammoth Spring, Ark., has been incorporated, with subscribed capital of \$25,000, and privilege of increase to \$150,000. R. L. Steele is president; P. B. Hynson, secretary, and G. C. Buford, treasurer. The new company takes over the Mammoth Spring Cotton Mills, a plant of 8000 ring spindles and 200 looms. Mr. Steele is also president of Steele's Mills, Rockingham, N. C., and he bought the Mammoth Spring plant several months ago.

Alpha Cotton Mills of Jonesville, S. C., will change its name to Jonesville Manufacturing Co. and increase capital stock from \$100,000 to \$250,000. Its plant has 7000 ring spindles, manufacturing 8s to 30s white hosiery yarn, which are taken by Jonesville Knitting Mill and knit into hosiery. This latter plant has 100 knitting machines, and the Jonesville Manufacturing Co. will meet April 3 to acquire the knitting-mill property. These two plants have heretofore been closely allied, J. J. Littlejohn being their president.

#### QUOTATIONS OF COTTON YARNS.

By Buckingham, Paulson & Co., New York, Philadelphia and Chicago, March 10.

No. 10s-1 and 12s-1 warps.....	15 1/2 @ 16
No. 14s-1 warps.....	16 1/2 @ 17
No. 16s-1 warps.....	17 1/2 @ 18
No. 20s-1 warps.....	18 1/2 @ 19
No. 22s-1 warps.....	19 1/2 @ 20
No. 26s-1 warps.....	20 1/2 @ 21
No. 6s to 10s yarn.....	14 1/2 @ 15
No. 12s-1.....	15 1/2 @ 16
No. 14s-1.....	16 1/2 @ 17
No. 16s-1.....	17 1/2 @ 18
No. 20s-1.....	18 1/2 @ 19
No. 22s-1.....	19 1/2 @ 20
No. 26s-1.....	20 1/2 @ 21
No. 8s-2 ply soft yarn.....	15 1/2 @ 16
No. 10s-2 ply soft yarn.....	16 1/2 @ 17
No. 8s-2 ply hard.....	15 1/2 @ 16
No. 10s-2 ply hard.....	16 1/2 @ 17
No. 12s-2 ply hard.....	17 1/2 @ 18
No. 14s-2 ply.....	18 1/2 @ 19
No. 16s-2 ply.....	19 1/2 @ 20
No. 20s-2 ply.....	20 1/2 @ 21
No. 22s-2 ply.....	21 1/2 @ 22
No. 26s-2 ply.....	22 1/2 @ 23
No. 8s-3, 4 and 5 ply.....	15 1/2 @ 16
No. 10s-3 ply chain warps.....	16 1/2 @ 17
No. 12s-3 ply chain warps.....	17 1/2 @ 18
No. 14s-3 ply chain warps.....	18 1/2 @ 19
No. 16s-3 ply chain warps.....	19 1/2 @ 20
No. 20s-3 ply hard twist.....	20 1/2 @ 21
No. 22s-3 ply hard twist.....	21 1/2 @ 22
No. 26s-3 ply hard twist.....	22 1/2 @ 23

#### Japan and Gulf Ports.

In an interview at New Orleans, H. Warragai, manager of the New York office of Mitsui & Co. of Tokio, Japan, who operate a number of mills in Japan using cotton principally from Louisiana, Texas and Georgia, pointed out the advantages to accrue to New Orleans from the construction of an isthmian canal. He said that when the canal is built New Orleans will be one of the greatest ports in the world and will be in a position to draw from the whole of North America and ship to the whole world, and that a big trade with Japan would develop through it. He explained that because of the freight congestion it takes about forty days to ship cotton from middle Texas to the Pacific coast, but that when the canal is completed all this cotton will go through the new waterway and travel from New Orleans to Tokio in not more than forty-five days. He added that as soon as the canal is completed his firm will establish a steamship line between Tokio and the Gulf ports of the United States.

#### Texan Iron Industry.

The legislature of Texas has passed a bill appropriating \$150,000 for the purchase of timber lands near Rusk and the erection of a 50-ton iron furnace at the penitentiary at that point. The suggestion was made some time ago that the industry of making iron pipe at the penitentiary should be abandoned, as it had cost the State about \$1,000,000 since it was begun in the eighties. This suggestion started the general discussion that the result that a committee of the present legislature, after careful study of the situation, advised rehabilitation and enlargement of the industry instead of its abandonment, and recommended an appropriation of \$150,000 to enlarge the present furnace and to purchase the timber land as a source of supply of wood to be used in making charcoal for the furnace. The bill passed both houses of the legislature unanimously.

The city of Shreveport, La., has distributed in pamphlet form the annual report of Mr. C. G. Rives, city comptroller.

## COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

#### Oil Mills Near Augusta.

[Special Cor. Manufacturers' Record.]  
Augusta, Ga., March 7.

One of the wealthiest counties in Georgia, and one of the oldest and largest, is Burke county, lying just below Augusta, Ga. This county is the largest cotton county in the State—about 40,000 bales in the county. The agricultural lands of the county are very largely owned by rich merchants at the county-seat, Waynesboro, Ga. A number of farms in the county make from 300 to 400 bales each. While there is an oil mill at Waynesboro, which, before being sold to the combination, returned 50 per cent. to stockholders, there is out in the country and quite removed from railroads another oil mill, and what is more, two other oil mills are now being projected for the interior of this county, and quite apart from any railroad line. This is possibly quite an innovation in the matter of location for oil mills. When these two projected oil mills are built the fact that this county can support three oil mills off of the railroads becomes a notable fact. The oil mills about Augusta today are giving unheard-of prices for cottonseed, namely thirty cents a bushel. In a few cases as high as thirty-five cents a bushel in the past two months have been paid. At one time in the past month there was on a side-track of one of the railroad lines in Augusta eighty cars of cottonseed, to which some more were to be added the next day. N. L. WILLET.

#### A New Cotton-Oil Mill.

In a letter to the Manufacturers' Record David Boaz of Fort Worth, Texas, writes:

"I am now forming a syndicate to build and operate a \$50,000 cottonseed-oil mill at Sweetwater, Texas. Sweetwater is situated 200 miles west of Fort Worth on the Texas & Pacific Railway, where it is crossed by the Kansas City, Mexico & Orient Railroad. We think it is a very fine point for a mill, both as to getting cottonseed, as the country is settling up rapidly, and also as being in the heart of the cattle ranges of our great State, and in touch with the Fort Worth markets, where Swift & Co. and Armour & Co. are both located with their immense packing-houses. Thirty thousand dollars of our stock has been subscribed for, the business men and bankers of Sweetwater taking stock in the enterprise. The mill is within one mile of the quarantine line, which will enable us to place cattle on feed from above and below the line. We expect to be ready to start the mill by the 15th of next September, at the opening of the crushing season."

#### Cottonseed-Oil Notes.

It is announced that Walterboro, S. C., is to have a cotton-oil mill and ginnery. Through the efforts of the Young Men's Business League, more than half the capital stock, \$20,000, has been secured.

White Bedford of Lake Cormorant, Miss.; L. D. Whittaker and A. W. Whittaker of Memphis, Tenn., have incorporated a company, with a capital of \$55,000, for the erection of a cotton-oil mill at Lake Cormorant.

The Donalds Oil Mill Co. of Donalds, S. C., has been chartered, with a capital stock of \$15,000. The incorporators are W. R. Dunn, J. J. Dunn and G. T. Hogan of Donalds, M. B. Klinkscales of Due West and J. W. and L. A. Brock of Honea Path.

It is stated that all the cotton-oil mills in the State of Mississippi will be closed for the season during the next ten days. About forty mills have been in active operation during the season and the refined products turned out are estimated in value at about \$25,000,000.

The Transatlantic Trading Co. of Galveston, Texas, reports the exports of cottonseed products from New Orleans for the month of February as follows: Cottonseed meal 10,415 tons and cottonseed cake 9540 tons, making a total of 19,955 tons. Exports from Galveston for the same month, 5500 tons of meal.

A meeting was held at Fairburn, Ga., last week for the purpose of organizing a company for the erection of an oil mill at that place. A temporary organization was formed and a temporary board of directors, consisting of W. A. McCurry, W. T. Roberts, R. P. McLaine, L. M. Westbrook and J. H. Longino, was appointed to apply for a charter and do all preliminary work necessary.

The craze for investment in cotton-oil mills in Mississippi continues unabated. It is stated that a new mill is soon to be established at New Albany, in Union county. The capital of \$40,000 has already been subscribed, and the mill will be erected at once. Numerous inquiries from other points in the northern part of the State for data are being received at the State department at Jackson. There have been some thirty-odd oil mills established in Mississippi within the past twelve months.

The following were official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 7th inst.: Prime refined oil in barrels, 40 cents per gallon; off refined in barrels, 36 1/2 cents per gallon; prime crude, loose, 34 1/2 cents per gallon; off crude, loose, nominal; prime cottonseed cake, \$24.50 to \$24.75 per ton of 2240 pounds; off prime cottonseed cake, nominal; prime cottonseed meal, \$25 to \$25.75 per ton of 2240 pounds; off prime cottonseed meal, nominal; soap stock, \$1.15; linters, per pound, choice, 4 cents; A, 3 1/2 cents; B, 3 1/2 cents; C, 3 1/2 cents; cottonseed in sacks delivered in New Orleans, \$15 per ton of 2240 pounds; in bulk delivered in New Orleans, \$14 per ton of 2000 pounds.

Quotations on March 7 at the New Orleans Maritime and Merchants' Exchange, Limited (February shipment from the mill), were as follows: Prime cake, \$24.50 per long ton, ship's side; off cake, \$23 to \$24.25 per long ton, ship's side, according to quality; prime meal, \$25 per long ton, ship's side; off meal, \$23 to \$24 per long ton, ship's side, according to quality; prime crude oil, 34 cents per gallon loose f. o. b. mill; off crude oil, 27 to 30 cents per gallon loose f. o. b. mill, according to quality; prime refined oil, 39 1/2 cents nominal per gallon loose in barrels, ship's side; off refined oil, 36 1/2 to 37 cents per gallon loose in barrels, ship's side; soap stock, \$1.15 per 100 pounds, basis 50 per cent. fatty acid; linters, per pound, f. o. b. mills flat—A, 3 1/2 cents; B, 3 cents; C, 2 1/2 cents; low linters, 1 1/2 to 2 cents per pound f. o. b. mill flat, according to quality.

A feature of the ninth annual convention next fall of the Ohio River Improvement Association will be a pilgrimage of the officers of the association from Cincinnati to New Orleans with a view to awakening wider interest in the effort to secure a nine-foot stage in the Ohio river.

The sales in the Joplin (Mo.) district during the week ended March 7 were 9,298,640 pounds of zinc ore and 893,270 pounds of lead ore, valued in all at \$172,600.



## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

## LUMBER MARKET REVIEWS.

## Baltimore.

Office Manufacturers' Record,  
Baltimore, Md., March 11.

The inclement weather of the past week has restricted operations in many avenues of the local lumber trade. Receipts of lumber at the port have been light, and reports from milling points from which supplies are drawn show a scarcity of timber at mills, with stocks considerably reduced under a good demand. In a local way the situation is regarded as satisfactory, and with clear weather a good spring business is anticipated. In North Carolina pine the demand continues fairly active, with light receipts, and values firm. At a meeting of the North Carolina Pine Association held in Norfolk yesterday the price of No. 4 flooring was advanced \$1.50 per 1000 feet. The prices on all other grades and dimensions were not changed. White pine continues steady, with a moderate demand and stocks light. Cypress is in good request, and prices well maintained. There is a good inquiry for poplar, with keen competition at the mills among buyers. In hardwoods there is considerable strength in oak and ash, and in all other hardwoods on the market the tone is steady.

## Savannah.

[From our own Correspondent.]  
Savannah, Ga., March 9.

The movement during the past week in all avenues of the lumber industry of this section has been active. The demand from Northern sources continues, and all the mills in Southern Georgia are generally well supplied with orders. Shippers during the past week have been very busy, and the outlook is regarded by them as extremely encouraging. A summary of the shipments for the week, which is as follows, indicates a very healthy tone to business: By steamships to Baltimore 416,128 feet, New York 226,846 feet and Philadelphia 211,367 feet, or a total of 854,341 feet; by sail vessels to Baltimore 967,368 feet, New York 1,128,230, Philadelphia 1,434,385 and Fall River 400,330 feet, or a total of 3,930,321, making a grand total for the week by steamers and sail vessels of 4,784,662 feet. Prices throughout the general list for all desirable grades of lumber are strong, and are well maintained. The next meeting of the Georgia Saw-Mill Association is called by President H. H. Tift to meet in Jacksonville, Fla., tomorrow. Dr. Charles H. Herty, who is wintering at Thomasville, has been invited to address the meeting. One of the most important items before the association will be the discussion on the advance of prices of lumber. This was discussed at some length at the last meeting, held at Tifton, and it is thought that prices will be raised at least 10 per cent. The movement in naval stores is fairly active, with the market showing an advancing tendency. The market on Saturday was firm at 65 cents for spirits of turpentine, with light offerings. Rosins were firm at 46 cents for May-August delivery.

## Norfolk.

[From our own Correspondent.]  
Norfolk, Va., March 9.

The severe weather prevailing in this section recently has interfered materially with lumber operations. Logging operations have also been seriously affected, and in consequence the supply of lumber at mills has been much depleted. The general conditions surrounding the mar-

ket, however, continue satisfactory, and a healthy tone throughout the list of values is present. The demand from the usual sources is active, the better grades showing great improvement. Shipments, both by rail and sail vessels, are showing some improvement, and with settled weather lumbermen anticipate a heavy spring trade. The inquiries from Northern and Eastern markets indicate a large amount of actual business during the spring months. The local demand for lumber for building purposes is improving, and as the spring draws nigh a large amount of material will go into consumption. The foreign demand for lumber is gradually growing, and during the present month some large orders are likely to go forward. In a local way there is considerable activity among planing mills and other wood-working concerns, while many are running double time in order to satisfy their customers. In hardwoods the inquiry from both local and out-of-town dealers is fairly active. The foreign trade shows some improvement, and shipments are better. Oak, poplar and cypress are all moving more freely, while dealers report a good local demand for these woods. Among the enterprises established this week are the Henry Mayo Box Co. of Berkeley, with a capital of \$25,000, to manufacture lumber and boxes. Henry Mayo of Berkeley is president; W. W. Tunis of Norfolk, vice-president, and Leroy Tunis of Norfolk, secretary. Mr. Reed of Washington, D. C., who recently purchased timber properties near Brooks, Va., will erect saw-mill for developing the same. It is stated that the Dickson Lumber Co. of Asheville, N. C., will remove its lumber plant to Portsmouth, Va.

## Pensacola.

[From our own Correspondent.]  
Pensacola, Fla., March 9.

A steady improvement at this port for pitch-pine lumber and timber has been the rule so far during the present year, and the demand for timber is especially active at about 17 cents, with some sales reported for special lots at even higher figures. The exporter is now in a good position, the market being on a more stable basis than at any time during the past six months. A number of vessels are now in port, and will all take full cargoes of timber. It is said that these vessels will take out in the next five days about 25,000,000 feet of pitch-pine lumber and timber. Shipments have been made during the week ending the 6th inst. of 6,628,000 superficial feet of lumber and timber, 5000 pieces of oak shingles and a large quantity of oak staves. The cargoes were all for foreign ports, and is considered a good week's business under the conditions existing. The firm of H. Baars & Co. is now among the largest exporters at this port, and a number of vessels are loading cargoes every week for foreign ports for this concern. Work on the new mills of the German-American Lumber Co. at Millville, near here, has just been completed, and the mills are now running full blast. The plant has a capacity of 160,000 feet per day, and is owned by capitalists of this city and Germany. C. C. Mengel Bros. & Co. of Louisville, Ky., are importing through this port 8,000,000 feet of mahogany logs from Honduras, with a possibility of it being made 10,000,000 feet. The former has been contracted for to be delivered before next December. Shipments of lumber and lumber stuff were made during the past week to the following ports: Sestria, 423,000 superficial feet of sawn timber, 200,000 superficial feet of lumber; Rio Janeiro, 1,059,000 superficial feet of deals; Montevideo, 625,000 superficial feet of lumber; Liverpool, 60,000 superficial feet of oak lumber, 200,000 superficial feet of pine lumber, 51

pieces ash logs, 15,000 pieces oak staves; Savona, 247,000 superficial feet of lumber, 321,000 superficial feet of sawn timber; Buenos Ayres, 540,000 superficial feet of lumber; Rosario, 592,000 superficial feet of lumber; Port of Scirur, 1800 superficial feet of lumber, 6000 pieces shingles.

## Brunswick.

[From our own Correspondent.]  
Brunswick, Ga., March 9.

The outward movement of all classes of lumber continues to be large. The best indication of the heavy demand and subsequent volume of shipment shows up in a statistical report of the total movement for February, which amounted to 28,455,737 superficial feet. Out of this, 23,795,754 feet went coastwise, consisting of 11,631,000 feet of lumber, 3,300,000 feet of sawn timber, 8,623,044 superficial feet of railroad crossies (or 198,342 pieces), and 241,710 superficial feet of cypress shingles (or 1,208,550 pieces). The foreign movement amounted to a total of 4,659,983 superficial feet. The crossie movement still maintains the leadership in the outward movement. Lumber and timber shipments also show increases. Prices remain steady, and demand excessive. Report from the nearby port of Darien shows a total movement in February amounting to 8,197,014 superficial feet. Out of this, 947,014 feet went coastwise and 7,250,000 foreign, and as follows: France, 1,365,000 feet; England, 885,000 feet; Netherlands, 2,045,000 feet, and Ireland, 2,955,000 feet. Shipments for past week amounting to 846,000 feet. From the nearby port of Fernandina the February shipments amounted to 15,896,753 feet, of which 1,949,177 feet went foreign and 13,947,676 feet coastwise, the latter consisting of 5,565,630 feet of lumber, 8,369,056 superficial feet of railroad crossies (or 144,774 pieces), and 12,990 superficial feet cypress shingles (or 64,950 pieces). Large fleets now loading. Coastwise freights to Eastern points now quoted at lowest at \$5.50 from Brunswick to New York, basis for the South Atlantic, and from Fernandina and Jacksonville \$5.62½ and \$5.75.

## Memphis.

[From our own Correspondent.]  
Memphis, Tenn., March 9.

The hardwood lumber demand has kept up well throughout the past week, and as large a business has been done as the limited stocks of dry lumber and the car situation would allow. Prices have advanced in some items, though there has been nothing like a general horizontal raise of prices. Cottonwood is one of the strongest items of the list, and shows a constantly upward tendency. Firsts and seconds are now selling at \$24 to \$30 per thousand, while common and culls are going at \$16 to \$17 per thousand, and box boards, 13 inches and up, sell for \$33 to \$35 per thousand f. o. b. Memphis. The demand for this wood is very active, despite the fact that so many buyers are trying to find a satisfactory substitute therefor, while offerings are very light in dry stocks. At the same time the amount of stocks on sticks is not as large as one might imagine, owing to the scarcity of logs, which has prevailed during the past few months in this timber, and the disadvantages under which production has been carried on. Gum, which has been used to some extent as a substitute for cottonwood, is also showing an upward tendency, with the common and culls now selling at \$13 to \$13.50 per thousand, and with first and seconds going at \$24 to \$26 per thousand for inch stock. Cottonwood logs are selling at \$10 to \$11 delivered here, while gum logs are obtainable at \$5 to \$7 per thousand, according to their diameter and other specifications. Quartered white oak is selling at \$62 to \$65 per

thousand, with some of the trade asking as high as \$66. The differential between this and the other grades of oak is about the same as it has been for the past few weeks. The offerings in quartered white are very scarce, and buyers who are in the market for this are up against a right tough proposition. The car situation has not improved in the least; in fact, some of the trade here are of the opinion that it is growing worse. The lumbermen, to a man, complain of their inability to get cars as fast as they want them, and the wood-working plants are on the verge of shut-downs in a number of cases because their warehouses are full of goods which they have prepared for shipment, and they are unable to move the stuff because they cannot get the empties for loading. This traffic situation is easily regarded as the greatest drawback to both the lumbermen and the woodworking companies. Since the high water of the Mississippi, which is now about a foot and a-half over the danger line, came, the Yazoo & Mississippi Valley Railroad Co. has taken off its regular logging train, and some of the mills here dependent on the railroads for their logs have had to close down.

## Lumber Notes.

The Atlantic Shingle & Veneer Co. of Fayetteville, N. C., has been chartered, with a capital of \$15,000. A. H. Slocumb and others are stockholders.

The Sterling Lumber Co. of Atlanta, Ga., has been chartered, with a capital stock of \$20,000. The incorporators are W. S. Wilson, C. W. Tifts and H. S. Nash.

The Bollinger Lumber & Co. of Bayspur, Ark., has been incorporated, with a capital stock of \$30,000. A. E. Prince is president, and J. J. Bollinger, vice-president.

The shipments of lumber from the port of Fernandina, Fla., for the month of February aggregated 10,968,048 feet coastwise and 1,949,177 feet foreign, or a total of 12,917,225 feet.

The Seaboard Lumber Co. of Atlanta, Ga., just chartered, is capitalized at \$1000, with the privilege of increasing the sum to \$25,000. F. R. Logan, L. J. Harris and W. L. Zachary are the incorporators.

One day last week nine vessels were anchored at the Gulf & Ship Island pier at Gulfport, Miss., loading with lumber for foreign ports, their individual cargoes ranging from 350,000 to 2,750,000 feet of lumber.

The Muscogee Lumber Co. of Columbus, Ga., has been incorporated, with a capital stock of \$5000. The incorporators are Charles F. Land of this county and J. R. Dent and C. H. Watkins of Russell county, Alabama.

The Cotten Bros. Cypress Co., Limited, of Morgan City, La., started its new saw-mill on the 2d inst. This mill has been under construction for several months and is not fully completed. The capacity is 50,000 feet per day.

Ground has been broken at New Iberia, La., for the erection of the \$500,000 saw-mill plant to be built by local capitalists. The machinery is beginning to arrive, and switches are being laid for transportation of same to mill grounds.

Mr. C. L. Hardy of Lecompte, La., has completed arrangements to begin at once the erection of one of the largest saw-mills in that section of Louisiana. The plant will be located near the Texas & Pacific Railroad depot in Lecompte.

The North Carolina Pine Association, composed of lumbermen of Maryland, Virginia and North Carolina, held its annual meeting and banquet in Norfolk on the

10th inst. The price on No. 4 flooring was advanced \$1.50 per 1000 feet. The prices on all other lumber will remain as they are at present.

The following vessels cleared last week from Charleston, S. C., with lumber cargoes: Schooner Georgetta Lawrence, 225,000 feet; schooner Blanche Hopkins, 340,000 feet, both for New York; the schooner Edgar C. Ross cleared for Baltimore with 291,000 feet, and steamship Huron for Boston with 38,050 feet among her cargo.

John G. Evans, Box 605, Mobile, Ala., wants to correspond with manufacturers of white pine and basswood lumber, such as is used for making wood boxes. He also wants prices on 300 feet of lumber twelve inches wide by three-sixteenths of an inch thick, dressed on both sides; also wants to correspond with manufacturers of small white-pine boxes.

The large steam saw-mill of the Preston Lumber & Coal Co., located at Crelin, two miles west of Oakland, Md., was destroyed by fire on the 5th inst. In the yards were over 1,000,000 feet of lumber, which were saved. The loss is estimated at \$45,000 on building and machinery, with \$15,000 insurance. The mill had a capacity of 80,000 feet of lumber a day.

The Henry Mayo Box Co. of Berkeley, Va., has been chartered, with a capital of \$25,000. The company will conduct a general lumber and box business in all its branches. The following officers will manage the affairs of the company for the first year: Henry Mayo of Berkeley, president; W. W. Tunis of Norfolk, vice-president; Leroy Tunis of Norfolk, secretary.

It is stated that the Dickson Lumber Co., composed of H. M. Dickson and Geo. W. Moore, now of Asheville, N. C., has decided to remove its plant. The plant of the company will be removed to Norfolk at once and located on the south branch of the Elizabeth river, a site having been secured. The Dickson Lumber Co. is one of the largest exporters of hardwood in this country and receives its lumber from nine different States.

It is stated that Percy Loomis and C. A. Scott, two well-known lumbermen of Chattanooga, Tenn., have commenced work on a large band-saw and planing mill at Tellico, Tenn. They have purchased a large tract of timber land in the vicinity of Tellico Junction, and intend getting out dressed and rough lumber to supply the local market. Quarter-sawn oak will be the specialty of the new company. The plant is expected to be in operation by May 1.

It is said that a large plant to cost \$75,000 or \$100,000, for the manufacture of hardwood flooring, is likely to be established in Montgomery, Ala. Mr. Thomas S. Palmer of Pennsylvania and Mr. J. M. Lawson of New York recently visited that city to investigate the feasibility of establishing such a plant. The Commercial and Industrial Association, which is now in correspondence with these gentlemen, hopes that the enterprise will be secured for Montgomery.

The following vessels cleared from Jacksonville with cargoes of lumber: Schooner Robert McQuillin for New York with 300,000 feet; British schooner Marjorie J. Sumner for St. John, N. B., with 295,000 feet; the Clyde steamer Apache cleared for New York with 475,000 feet of lumber and 5000 bundles of shingles, with other cargo, and the steamer Navahoe for Boston with 450,000 feet of lumber, 3000 crossties, 25,000 bundles of shingles, 800 packages of naval stores and 1160 sundries.

The shipments of lumber from the port

of Mobile last week aggregated 887,472 feet, and for the season 40,765,132 feet, against 49,231,268 feet last year. The shipments of sawn timber aggregated 254,600 cubic feet, and for the season 5,029,187 cubic feet, against 5,629,493 cubic feet last year. Exports of other lumber were in cubic feet—oak, 197,334; poplar, 132,092; ash, 35,290; gum, 14,926; hickory, 3480; cypress, 67,918; cottonwood, 6278; elm, 122; shingles, 165,750; staves, 718,523; crossties, 113,151; laths, 164 bundles; 22,335 p. p. pickets, 943 pieces piling, 4504 telegraph poles.

The National Wholesale Lumber Dealers' Association of the United States opened its eleventh annual convention last week in Washington, D. C. Mr. Pendenis White of New York called the convention to order and delivered his annual address. Mr. Eugene F. Perry of New York, secretary of the association, read his annual report. The president called the convention to order at the morning session of the second day's proceedings. Reports were submitted by the committees on legislation and arbitration. Mr. W. G. Hollis of Indiana presented a resolution adopted by the Western Association to the effect that their relations with the wholesalers would continue to be friendly, but that the retailers were unable to live up to the agreement signed at Boston in 1899, and subsequently amended, which provided for a reciprocal arrangement under which the wholesalers were not to infringe on certain stipulated rights of the retailers regarding sales, and the retailers were to buy their supplies from the wholesalers altogether, and not from outside parties. It was pointed out that courts in the West have decided that such an agreement is in restraint of trade, and, therefore, unlawful. The decision of the Western associations was accepted in the best possible spirit by the wholesalers, and the withdrawal of the former accepted, but with regrets. Resolutions were adopted favoring the conduct of forestry operations on a scientific basis, and endorsing the work of Prof. Gifford Pinchot of the Agricultural Department. Resolutions were also passed insisting upon greater consideration in the matter of railroad transportation from the claims departments of the various railroad carriers. Differences between the wholesalers' and the retailers' associations of the East were discussed, with the result that the latter have withdrawn from what is known as the Boston agreement of 1899. The action of the retailers, however, was not entirely unanimous, and several of the constituent associations have declared their intention to live up to that agreement, of which an essential feature is the arbitration of differences arising on the classification question. The following officers were elected: President, Pendenis White of North Tonawanda, N. Y.; first vice-president, Lewis C. Slade of Saginaw, Mich.; second vice-president, Guy Gray of Cleveland, Ohio; treasurer, Fred W. Cole of New York; secretary, Eugene F. Perry of New York city. The following were elected trustees: Lewis C. Slade, Saginaw; Fred W. Cole, New York; Morris S. Tremaine, Buffalo; R. B. White, Albany; Gordon C. Edwards, Ottawa, Ontario; W. W. Lockwood, New York, and J. M. Hastings, Pittsburg. This completed the work of the association, and it adjourned, to hold its next annual meeting at a place to be determined hereafter.

It is announced that the armored cruiser West Virginia will be launched by the Newport News (Va.) Shipbuilding & Dry-Dock Co. on April 16. The vessel will have a displacement of nearly 15,000 tons and a speed of twenty-three knots.

## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., March 11.

The local phosphate market still continues rather quiet, with no disposition on the part of fertilizer men to increase their supplies. The tone of prices is steady, with light offerings. Among the phosphate charters reported last week are the following: Norwegian bark Lady Penrhyn from Pensacola to New Zealand on private terms; bark Fluorine, 367 tons, from Port Tampa to Philadelphia at \$2.05; schooner Thomas S. Dennison, 1329 tons, from Port Tampa to Baltimore at \$2, and schooner Montana, 337 tons, from Philadelphia to Charleston, S. C., with coal at \$1.40 and back to Barren Island at \$2.35 and discharged. Mining operations in the South are still restricted by bad weather and scarcity of cars, and, although shipments so far this year from the ports have been much lighter than last year, indications point to more activity during the spring months. Prices for hard rock in Florida are about steady, but the market is quiet, owing to competition between large producers who have European connections. In the pebble section there is a better tone to the market, and values are firmer, with a better demand from home and foreign sources. The demand for Tennessee rock at Mt. Pleasant and other mining sections in the State is much improved, and orders from the interior are numerous, and, as cars are now available, shipments will improve. The list of values for both domestic and foreign rock is strong. The South Carolina market for phosphate rock is now nominally steady, and mining operations vigorously pursued by those engaged.

### Fertilizer Ingredients.

There is a good demand in the ammoniate market from Eastern buyers, and also from Southern sources. Stocks in the hands of Western packers are light. Values are firm. Messrs. Thos. H. White & Co., in reviewing the market during the month of February, say: "The market for ammoniates during February was quite active, prices were well maintained, and at the close were firm, with tankage somewhat higher. Stocks in the West are usually light for shipment as far forward as May 1, and the inquiry from both East and South is good."

The following table represents the prices current at this date:

Sulphate of ammonia (gas)...	\$3 10 @ 3 12½
Nitrate of soda, spot Balto...	2 10 @ 2 20
Blood .....	2 65 @ 2 67½
Azotine (beef) .....	2 60 @ —
Azotine (pork) .....	2 60 @ —
Tankage (concentrated) .....	2 47½ @ 2 50
Tankage (9 and 30) .....	2 67½ & 10½ @ 2 70 & 10
Tankage (7 and 30) .....	2 50 @ 2 10 00
Fish (dry) .....	32 50 @ 35 00

### Phosphate and Fertilizer Notes.

The General Beauxite Co. of Perry-smith, Ark., is developing fuller's-earth deposits near Germania.

The shipments of Tennessee phosphate rock from the port of Pensacola, Fla., for 1902 aggregated 104,060 tons.

The Hancock Liquid Sulphur Co. of Baltimore, Md., has been incorporated, with a capital of \$250,000, by Abram O. Hancock, Robert W. Menifee and Harry L. Denny.

It is stated that the New Orleans Belt & Terminal Co. has leased to the International Chemical Co. of New Orleans a tract of land directly in the rear of Port Chalmette, on which a large factory will be immediately erected.

Messrs. J. M. Lang & Co. of Savannah, Ga., report the shipments of high-grade Florida phosphate rock from that port for February at 8644 tons; previously reported, 7157 tons, making a total for two

months ending February 28 of 15,801 tons.

The shipments of Florida high-grade phosphate rock from the port of Fernandina, Fla., for the month of February aggregated 6700 tons; previously reported, 3155 tons, making a total of 9855 tons for two months ending February 28, 1903.

Virginia-Carolina Chemical Co., Richmond, Va., announces that on March 10 it declared a dividend of 2 per cent., being No. 30, on its preferred stock, payable April 15. Checks will be mailed to stockholders of record March 31. Books for transfer of preferred stock will be closed from April 1 to 15.

The Hunter Chemical Co. of Norfolk county, Virginia, has been chartered, with a capital stock of \$50,000. The company proposes to manufacture, buy and sell chemicals and by-products. The officers of the company are H. Blount Hunter, president, and Frank P. Hunter, vice-president, both of Portsmouth; Frank E. Wilcox of Norfolk, treasurer; Ernest Goodwyn of Norfolk, secretary.

### For Camp and School.

For several summers Mr. William Tappan of the University School for Boys of Baltimore has been at the head of a summer camp for boys on Lake Sebago, Me. Camp Kah-geon-wah offers the opportunity for a delightful holiday outing under ideal conditions, and at the same time provides an opportunity for vacation study under favorable conditions. This study is not required as a part of the camp life, but it is offered to the boys who wish to avail themselves of the chance. The camp has had a rapid growth, and already applications for the season of 1903 have begun to come in. This growth has made it necessary to set a limit to the number of boys who will be received, and there is every indication that the applications will be far in excess of this number. The success of the camp has been due to the fact that it has been found to be all that was claimed for it, and to the unsurpassed natural advantages of its location, the completeness and thoroughness of its equipment and the care taken to secure the best possible surroundings for the welfare of the boys. Mr. Tappan, as heretofore, will give his personal attention to the management of the camp, and will be aided by a corps of competent and trustworthy men.

### Georgia Gold Fields.

The United States Geological Survey will shortly issue a topographical map of the Dahlonega quadrangle in Georgia, covering all of White and Towns counties and portions of Union, Lumpkin, Habersham and Rabun counties.

The region is of special interest, as it includes the famous Dahlonega section, one of the earliest and most valuable gold-mining regions of the East. Here was located a United States mint, which remained in operation until 1861. Gold was first taken from the Chestatee river gravels and other deposits of the region by placer mining, and dredging the river bottom for gold is still practiced. Of late years deep mining has been resorted to in the surrounding hills, and large stamp mills and chlorination plants have been erected at Dahlonega.

The sheet also shows the region in which is the rich deposit of pyrite that was recently opened to supply material for the manufacture of sulphuric acid.

The Chamber of Commerce of Savannah, Ga., has been organized with 442 members and with the following named officers: Col. J. H. Estill, president; Leopold Adler, T. W. Tiedeman, Herman Myers and W. W. Williamson, vice-presidents, and W. F. McCauley, treasurer.

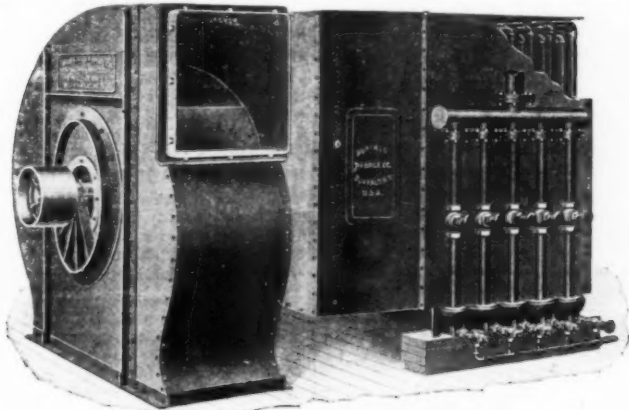


## MECHANICAL.

## Drying Cotton Cloth by Exhaust Steam.

By WESLEY BARTINE.

The application of exhaust steam to the drying of cotton cloth in place of live



DRYING COTTON CLOTH BY EXHAUST STEAM.

steam, as used at the present time, is practically in its infancy, and in order to fully demonstrate the immense saving by this means of drying over the old the writer has selected the plant of S. Lea & Sons of Philadelphia, Pa., as it was here that the old style of drying was used for years.

The plant's principal business is the finishing of cotton goods, and for this work it has four tentering machines, manufactured by H. W. Butterworth & Sons Company of Philadelphia. These machines are made to accommodate cloth from twenty-seven to forty-two inches wide, and are so constructed that when the cloth is fastened in position it makes the top and bottom of a large box, the width of which is the width of the cloth, twenty-four inches high and sixty feet long. On the inside of this box, at the upper and lower corners of the sides, is a traveling belt carrying teeth, upon which the cloth is fastened and which holds it down close to the sides, practically making an air-tight box, size as given above.

The cloth is starched and stretched and run over hot rollers; it is then started through the tentering machines. It is fed in the machine at one end and taken away at the same end thoroughly dried and finished. By means of galvanized-iron piping the hot air from the hot-blast apparatus is let into the box from the side. Therefore, when the cloth is stretched across the top and bottom of this box and apparatus is working, you will see that it is compelled to travel 120 feet, and the hot air, having no other means of escaping, is compelled to follow its way through the interstices in the cloth and carry with it the moisture, thereby drying the same. Previous to the change each tentering machine was supplied with a separate apparatus, which consisted of two 45-inch and two 60-inch steel-plate blowers, running at 1200 and 900 revolutions per minute, respectively, with two 10-section 2-row and two 8-section 2-row heaters. The heaters require two two-inch pipes, with valves wide open when taking steam eighty to ninety pounds at apparatus. By stopping to consider the amount of live steam used, you will note that 150 boiler-horse-power would be very conservative, and when considering the enormous speed of the blowers, you can safely say they were consuming fifty-five actual horse-power when running the same.

In determining the basis and size of apparatus which could be used to take the place of the old arrangement, it was necessary to obtain the amount of moist-

ure to be absorbed. In weighing the cloth after same was finished and before they found a difference of thirteen pounds, which represented the amount of moisture in the cloth which would pass through the four machines every minute.

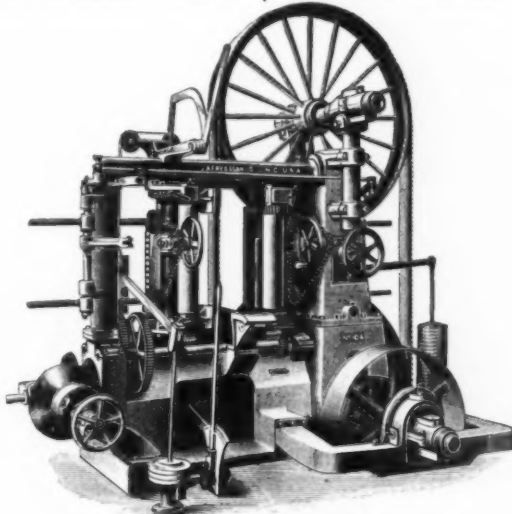
Also particular attention was paid to the temperature of the inflowing air, and

by test the air under the old arrangement was found to be entering the machines at about 180 degrees. After reducing the temperature to about 120 degrees it was found that the material dried as well as with the higher temperature. Also they

heater is of the draw-through pattern.

By using this apparatus we were able to save twenty actual horse-power in the running of same over and above that used for running the four individual apparatus, and as there was an abundance of exhaust steam, we have saved 150 boiler-horse-power per hour. When taking in the aggregate we were saving from two to two and one-half tons of coal per day of ten hours' run; also the convenience of having the apparatus all in one place, the necessary saving in repairs and the working of the complete apparatus under the direct control of the engineer; also the valuable floor space which was previously occupied by four pieces of apparatus on the second floor. By using a large fan and heater they have been able to dry the same amount of cloth as previously dried and entirely by the use of exhaust steam. When checking over the actual amount of air delivered by the former fans at the speed given, we find that they were giving 43,000 cubic feet. As we require 46,000, you will see we are perfectly safe in our calculations. The results also to be particularly noted are the requirements necessary, which are not so much the temperature as the requisite amount of air for drying materials of this nature.

Buffalo Forge Co., Buffalo, N. Y., installed this drying system.



NEW No. 101 BAND RESAW.

## New Band Resaw.

One of the most useful machines in lumber and box mills and other places where heavy work is required is the band resaw. The woodworker, therefore, is continually on the watch for the latest tools offered in this line. Attention is therefore

called to a new band resaw herewith illustrated. The maker claims to have incorporated in its construction the points of advantage that will prove a revelation to all interested in band resaws.

It has been built to meet the demand for a band resaw capable of doing good work in cottonwood and other such stringy wood, and for this class of work its maker cannot too highly recommend it. Band-sawing machinery has always been one of its most successful specialties, and all the devices and improvements that could be suggested from long experience are embodied in this new tool, which is its representative one in this line.

Limited space precludes a detailed exposition of these points, so circulars should be sent for in order to thoroughly understand them. We can here only mention one or two.

The new sensitive straining device always maintains an even tension on the saw blade, all slack being instantly taken up, and thus materially adding to the life of the saw blade. The lower wheel is solid, lessening circulation of dust and air, and being heavier than the upper, controls its movements and increases the momentum, a thing so essential in heavy work. All the different adjustments of the feed rolls, upper wheel, etc., are easily and accurately made, and the most important are made from the working side of the machine. The feed is under instant control of the operator, and can be varied any feet to 150 per minute.

Further particulars can be obtained from the maker, J. A. Fay & Egan Co., 270 to 290 West Front street, Cincinnati, Ohio.

## Commercial Club Building.

Numerous imposing and costly structures are being built throughout the South. The Commercial Club of Charleston, S. C., is about to erect a handsome structure, an illustration of which is presented herewith. The building has been designed by A. W. Todd, architect, 63 Broad street, Charleston. It will cost about \$60,000, have every modern convenience to make it an up-to-date clubhouse in every respect, and be 91x120 feet, four stories high. The Chamber of Commerce, Merchants' Exchange, store conveniences and equipment of machinery will be located on the first floor; on second floor will be clubrooms, including gymnasium, restaurant and game equipment; third floor will have sleeping-rooms; fourth floor constitutes a large hall for entertainments, with stage and dressing-rooms, etc. Hot water will furnish the heat and electricity will operate the elevators.



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

**Anniston—Glass Factory.**—The establishment of a \$100,000 glass factory is probable. Samuel Rodgers, president of Southern Hardware Co., is interested.

**Bessemer—Pipe Works and Furnace.**—John W. Harrison will, it is reported, establish large pipe works, also furnace in connection therewith.

**Birmingham—Power Plant.**—Birmingham Railway, Light & Power Co. will hold meeting April 15 to vote on increasing capital stock from \$5,000,000 to \$6,500,000 for the purpose of further increasing capacity of its plant and for prosecuting improvements now being made.

**Birmingham—Laundry.**—Chartered: Savoy Laundry Co., with capital of \$250, by C. B. Freeman, E. H. Elieby and others.

**Birmingham—Steel-rail Mill.**—Tennessee Coal, Iron & Railroad Co. will begin about April 1 the manufacture of open-hearth steel rails at Ensley, and will roll about 10,000 tons per month.

**Birmingham—Ice Factory and Cold-storage Plant.**—American Ice & Industries Co., W. H. Morris, president, will begin erection of its proposed plant; capacity of ice factory will be 150 tons per day, and cold-storage space 200,000 cubic feet. Company is now receiving bids on materials for construction of building.

**Birmingham—Coal Mines.**—Lucile Coal Co. has issued \$200,000 of bonds, which will be expended in extensive developments of its coal properties in Bibb county.

**De Armanville—Ore Mines.**—Wade Allen of Anniston, Ala., has purchased ore properties near De Armanville, and will install washer.

**East Lake—Water-works.**—City contemplates issuing \$100,000 of bonds for construction of water-works. Address "The Mayor."

**Florence—Telephone System.**—Southern Bell Telephone & Telegraph Co., 26 Cortlandt street, New York, N. Y., will install new system at Florence to cost \$9000.

**Florence—Improvements.**—W. J. Beddingfield has purchased Bailey Springs, summer resort; will remodel buildings and make other improvements.

**Fort Payne—Electric-light Plant.**—City will

install electric-light plant. Address "The Mayor."

**Gadsden—Coal Mines.**—C. M. Baugh and R. T. Baugh have purchased and will develop coal lands near Carlisle.

**Huntsville—Furniture Company.**—Jackson Furniture Co. has been incorporated, with capital of \$10,000, by C. E. Jackson, T. J. Newsom and O. A. Smith.

**Huntsville—Electric-light Plant.**—Bill has passed legislature authorizing city to issue \$20,000 for installation of municipal electric-light plant. Address "The Mayor."

**Huntsville—Cannery.**—E. Baylor Stewart will establish cannery with daily capacity of 10,000 cans.

**Marion—Ice Factory.**—Marion Electric Light & Power Co., T. D. Kemp, manager, contemplates establishing ice factory.

**Montgomery—Hardwood Flooring Mills.**—Thomas S. Palmer of Pennsylvania and J. M. Lawson of New York contemplate establishing mills for manufacture of hardwood flooring, to cost about \$100,000.

**Opelika—Oil Refinery and Soap Factory.**—Northern parties, through Street & Roberts, have purchased plant of Opelika Milling Co., and will expend \$10,000 in erection of oil refinery and soap factory.

**Sulphur Springs—Gold Mines.**—Gold has been discovered on property of M. S. Brown, and will be developed.

## ARKANSAS.

**Archibald—Plantation.**—Chartered: Archibald Plantation Co., with capital of \$50,000; W. T. Bragg, president; R. L. Stuart, vice-president; J. W. Duffie, secretary, and Reginald Archibald, treasurer.

**Bayapur—Lumber and Cooperage Company.**—Bollinger Lumber & Cooperage Co. has been incorporated, with capital of \$30,000. A. E. Prince is president; J. J. Bollinger, vice-president.

**De Queen—Cannery.**—De Queen Canning Co. has incorporated, with capital of \$5000; H. C. Williamson, president, and F. M. Smith, secretary. Machinery has been contracted for, but no contracts for building have been awarded.

**De Queen—Ice Plant, Ginney, etc.**—De Queen Light, Ice & Cold Storage Co., recently reported incorporated with capital of \$50,000, will install cold storage and ice in connection with its electric plant already established; will also install ginney later on. Machinery contract has been awarded; contract for building not let.

**Eureka Springs—Medical Association.**—Chartered: Interstate Medical Association, with capital of \$100,000. Geo. West is president; Chas. E. Davis, vice-president; R. H. Stein, secretary.

**Fort Smith—Wagon Factory.**—Ingle Wagon Manufacturing Co. has been incorporated, with capital of \$100,000, to manufacture vehicles; H. B. Salls, president; Seth Spangler, vice-president; A. J. Ingle, secretary, and J. H. Alexander, treasurer.

**Germania—Fuller's-earth Mine.**—General Beauxite Co. of Perryville, Ark., is developing fuller's-earth deposits near Germania.

**Heth (not a postoffice)—Plantation Company.**—Heth Plantation Co. has been incorporated, with capital of \$50,000. F. L. Heth is president; J. J. Brinkerhoff, vice-president; F. C. Kimber, secretary, and others.

**Hopefield—Cotton Compress, Gin, etc.**—Wisner Cotton Co. has been incorporated, with capital of \$135,000, for erection and operation of cotton compress and cotton gin, by C. N. Wisner, J. B. Edgar, W. C. Early, Herbert Moore and others. Incorporators are all from Memphis, Tenn., where company will have principal office.

**Jonesboro—Tinning and Plumbing.**—Chartered: Citizens' Tinning & Plumbing Co., with capital of \$5000. A. L. Krewson is president; C. L. Kennard, vice-president, and D. M. Cooley, secretary.

**Little Rock—Cotton Mill.**—Max Helman, H. M. Remmel, John G. Fletcher and others propose organizing a \$250,000 company to build cotton mill.

**Little Rock—Catering.**—Chartered: Falstaff Catering Co., with capital of \$18,500.

**Mammoth Spring—Cotton Mill.**—Steele's Cotton Mills has been incorporated, with capital of \$25,000, and privilege of increase to \$150,000, for manufacturing cotton goods; R. L. Steele, president; P. B. Hynson, secretary, and G. C. Buford, treasurer. (Mr. Steele is president of Steele's Mills, Rock-

ingham, N. C., and several months ago bought Mammoth Spring Cotton Mills; this has 8000 spindles and 200 looms.)

**McCrory—Telephone System.**—W. H. Patterson Telephone Co. has been incorporated, with capital of \$20,000, for constructing telephone system, by W. H. Patterson (president) and others.

**Monticello—Furniture Company.**—Drew Furniture Co. has increased capital from \$4000 to \$7500.

**Newport—Realty Company.**—Chartered: Wolf-Goldman Realty Co., with capital of \$50,000; Sigmund Wolf, president; Mamie Goldman, vice-president, and Isaac Goldman, secretary.

**Pine Bluff—Mercantile.**—Chartered: Fries Liquor Co., with capital of \$10,000, by Lee Wertheimer (president) and others.

**Pine Bluff—Mercantile.**—Chartered: John F. Sennett Co., with capital of \$25,000, by John F. Sennett and others.

**Pine Bluff—Electric-light Plant.**—Citizens' Light & Transit Co. will make extensive improvements.

**Waldo—Mercantile.**—Chartered: Charles Clark & Co., with capital of \$15,000, by Chas. Clark (president) and others.

## FLORIDA.

**Century—Brick Works.**—G. W. Dean will establish brick works with capacity of 20,000.\*

**Gainesville—Electric-light Plant.**—Gainesville Gas Co. has made proposition to city for installation of electric-light plant.

**Jacksonville—Camphor Factory.**—Archibald Meldrum and M. Temple Taylor of Savannah, Ga., are investigating with a view to establishing \$50,000 plant for manufacture of camphor and its by-products; output to be 600 pounds a day, with facilities for increasing to 1500 pounds a day.

**Jacksonville—Lumber Mills.**—Scotland Mills, lately reported incorporated, are successors to Fairhead, Strawn & Co., manufacturers of lumber; will erect dry-kiln of 10,000 feet per day capacity; B. R. Powell, general manager.

## GEORGIA.

**Americus—Canning Factory.**—Wallis Bros. will increase capacity of their cannery by installation of power plant, etc.

**Atlanta—Subway.**—Plans for subway to connect North Boulevard and South Boulevard under tracks of Southern and Georgia railways have been completed by Second Assistant Engineer W. T. Wilson, under directions of City Engineer R. M. Clayton. Length will be about 354 feet, and cost about \$5000.

**Atlanta—Catering.**—Chartered: Silverman Catering Co., with capital of \$5000, by Harry Silverman and others.

**Atlanta—Plow Company.**—Walker Sims Plow Co. has amended charter, changing name to Atlanta Agricultural Works; also has privilege of increasing capital from \$25,000 to \$250,000.

**Atlanta—Amusement Resort.**—Ponce De Leon Amusement Co. has been incorporated, with capital of \$5000, and privilege of increasing to \$25,000, by J. G. Rossman, Wm. Sharp and H. M. Lofton, for making extensive improvements at Ponce De Leon, previously reported.

**Augusta—Mercantile.**—Chartered: Liberty Mercantile Co., with capital of \$4000, and privilege of increasing to \$20,000; company also has privilege to manufacture clothing, overalls, mattresses, etc.

**Broxton—Telephone Exchange.**—W. M. Denton of Douglas, Ga., has been granted franchise for installation of telephone exchange at Broxton.

**Buford—Belting and Glue Factory.**—Allen Rotary Suspension Tannage Co. has been organized, with Bona Allen, president; Bona Allen, Jr., vice-president, and W. B. Shodden, secretary-treasurer. It will erect \$150,000 plant for making belting, to be equipped with Allen rotary suspension system; also has purchased and will operate the glue factory of J. Swanton.

**Canton—Gold Mines.**—Howard M. Hooper of Pittsburg, Pa., has purchased Creighton Mining & Milling Co.; will reorganize company and operate properties on larger scale.

**Cartersville—Mining.**—Morgan Mining Co. has been incorporated, with capital of \$10,000, for development of mineral lands, by R. P. Morgan of Cartersville, J. J. Peter of Jefferson county, Kentucky, and others.

**Coldwater—Cotton-oil Mill.**—L. A. Galus will erect 20-ton cottonseed-oil mill.\*

**Columbus—Carriage Factory.**—J. L. Newman & Son and Bartlett & Sloan, carriage manufacturers, have consolidated and will operate as Columbus Carriage Works Co.

**Columbus—Broom Factory.**—Columbus Broom Factory has applied for charter and will manufacture brooms, brushes, woodenware, etc. Capital is \$10,000, with privilege of increasing to \$50,000; W. D. Britt, J. D. Britt and John F. Heffernan, incorporators.

**Columbus—Lumber Mills.**—Charles F. Land of Muscogee county, Georgia; C. H. Watkins and J. R. Dent of Russell county, Alabama, have incorporated Muscogee Lumber Co. for erecting lumber mills, etc.; capital \$5000.

**Durham (not a postoffice)—Coke Ovens, etc.**—Durham Coal & Coke Co., Chattanooga, Tenn., has made extensive improvements to its mines at Durham, which include fifty additional coke ovens nearing completion, \$15,000 coal chute, fifty new cottages, etc.

**Gainesville—Gold Mines.**—North Georgia Gold Co. has been incorporated, with capital of \$10,000, for development of gold and other minerals, by J. M. Proctor, Edward W. Axson and J. H. Clayton.

**Lawrenceville—Electric-light Plant.**—City will be lighted by electricity, town to furnish the plant, dynamo, wire, lamps, etc., and Lawrenceville Manufacturing Co. to furnish the power.

**Macon—Trousers Factories.**—Standard Manufacturing Co., operating five trousers factories, will remove the four operated at different cities to Macon and establish one large plant, erecting building 210x225 feet.

**Marietta—Soap Factory.**—Prince Jackson contemplates establishing soap factory.\*

**Moultrie—Machine Shops.**—Georgia Northern Railway Co. will remove its shops from Pldcock to Moultrie; F. R. Pldcock, general superintendent.

**Rossville—Woolen Mill.**—Park Woolen Mills will enlarge plant, erecting addition 50x270 feet, installing eighty additional looms and other machinery.\*

**Savannah—Gas Plants.**—Mutual Gas Improvement Co., which controls Mutual Gas Light Co., has purchased Savannah Gas Light Co., and several plants will be operated under one management.

**Summerville—Fruit Company.**—Lyery Fruit Co. has been incorporated, with capital of \$40,000, to take over Thompson Fruit Co.; Chas. A. Lyery, Geo. D. Lancaster, J. D. Marshall and others, incorporators.

**Upatole—Saw-mills, Cotton Gin, etc.**—Jas. W. Jackson, John S. Jenkins, John F. Ritch and others have organized Upatole Company, with capital of \$10,000, for operating saw-mills, cotton gins, cotton compresses, etc.

**Washington—Chair, Table, etc., Factory.**—G. S. Lindon contemplates establishing chair, table and hatrack factory.\*

## KENTUCKY.

**Auburn—Telephone Exchange.**—Herschel Helm of Morgantown, Ky., has purchased and will improve Auburn telephone exchange.

**Bardtown—Mercantile.**—Chartered: Wilson & Co., with capital of \$12,000, by W. A. Wilson and others.

**Boston—Chair Factory.**—Weikel Chair Co. of Louisville, Ky., will establish chair factory at Boston.

**Campton—Timber and Coal Lands.**—E. Sears of Parkersburg, W. Va., has closed deal for 2200 acres of timber and mineral lands in Menifee county.

**Hendersonville—Tobacco Factory.**—Robards Tobacco Co. will rebuild its factory, burned at loss of \$75,000.

**Hodgenville—Stave, Hoop, etc., Factory.**—Hodgenville Manufacturing Co. has organized to succeed Hodgenville Spoke & Lumber Co. in manufacture of barrel staves, hoops, etc.

**Lexington—Carriage Factory.**—C. L. Barnett, president Barnett Carriage Co., Cincinnati, Ohio, is investigating with a view to establishing branch factory at Lexington.

**Lexington—Lumber Mills.**—C. B. Lowry, H. P. Headley and Geo. W. Headley have incorporated Lowry Lumber Co., with capital of \$5000, for manufacturing lumber, etc.

**Lexington—Oil and Gas Wells.**—W. W. Webster of Philadelphia, Pa.; C. J. Bronston, M. C. Alford, F. C. Elkin and J. R. Allen, all of Lexington, have incorporated



Southern Oil Refining Co., with capital of \$100,000, for developing oil and gas lands, establishing refinery, etc.

Lexington—Gaspipe Line.—Ordinance has been introduced in city council granting franchise to J. H. Hazelrigg, F. A. Bullock, Desha Brockinridge and associates to lay pipe lines for natural gas.

Lexington—Heating Plant.—Ordinance has been introduced in city council granting franchise to Kentucky Heating & Illuminating Co. to install steam and hot-water heating plant.

Lexington—Oil Wells.—Great Northern Oil Co. of Michigan has purchased and will develop 70,000 acres of oil lands from Howard Plannigan Syndicate of Lexington.

Louisville—Cement Plant.—Eastern parties are investigating with a view to establishing Portland cement plant. Address secretary commercial club.

Louisville—Vinegar Works.—Chartered: Morgan-Lyons Vinegar Co., with capital of \$50,000.

Louisville—Rock and Asphalt Mines.—Chartered: National Rock & Asphalt Co., with capital of \$125,000, by B. F. Weitzel and E. W. Bentley of Louisville, J. S. Leech of Glasgow and others.

Louisville—Worsted Mill.—Hope Worsted Mills has received plans and specifications for building three stories high, 80x200 feet, to cost \$50,000. Its present equipment will be removed to this building and more machinery will be added. Company has 5700 spindles, six combs, seven sets, etc.

Louisville—Brick Works.—West Broadway Brick Co. has been incorporated, with capital of \$30,000, by H. Panke, George Feldman, J. F. William Selke, Geo. D. Nagle, Jr., and others.

Moberly—Brick and Tile Works.—Moberly Tiling & Manufacturing Co., lately reported incorporated, will erect plant for manufacture of bricks and tiling; contracts not awarded; William Taylor, Waco, Ky., architect; Wilson Tate, president.\*

Owensboro—Carriage and Wagon Factory.—Owensboro Wagon Co. and Owensboro Buggy Co. have consolidated, and will operate under one management, with capital stock of \$500,000.

Paducah—Medicine Company.—S. H. Windstead Medicine Co. has increased its capital to \$50,000.

Paducah—Medicine Company.—M. L. Schoffner, W. R. Hayes, W. M. Reed and others have incorporated Schoffner-Hayes Medicine Co., with capital of \$20,000.

Pikeville—Water-works.—Crystal Water-Works Co., for constructing system of water-works, has been incorporated, with capital of \$15,000, by W. B. Cox and A. S. Leslie of Williamson, W. Va.; Benton Cox and others.

Pineville—Sewerage and Water-works.—W. B. Cox has franchise for water-works and sewerage system.

Pineville—Mining.—Kentucky-Kansas Mining & Milling Co. has increased capital form \$5000 to \$10,000.

Richmond—Oil Wells.—Owsley-Clay Oil Co. has been incorporated, with capital of \$25,000, by Robert R. Burnam, H. G. Turner of Richmond, P. C. Eversole of Perryville and others.

Stephensport—Cement Plant.—Logan C. Murray, president American National Bank, Louisville, Ky.; J. F. Elson, Charles Elson and others are investigating the rock and clay deposits at Stephensport with a view to establishing Murray Cement Mill at cost of about \$250,000.

#### LOUISIANA.

Buras—Oyster Cultivation.—Bayou Jack Oyster Co., Limited, has been organized, with capital of \$10,000, for cultivation of oyster lands, etc., by John Bernard Easterling, Erick Anderson and John Johnson.

Crowley—Oil and Mineral Lands.—Decatur Oil & Mineral Co. has been chartered by A. R. Scott, W. W. Duson, George A. Stradler and others for development of oil and mineral lands.

Crowley—Electric Plant and Water-works. City will issue \$100,000 of bonds to improve water-works and install 10,000-light plant previously reported. Communications in regard to engine, dynamos, wire, etc., also water pipes and fittings, must be addressed to Arnias Durio, superintendent.\*

Lake Charles—Paint Factory.—Pelican Paint Co., with capital of \$30,000, has purchased full equipment for its proposed paint factory; B. E. Nash, manager.

Lake Charles—Real Estate.—Moore Bros. (dealers in real estate) have incorporated as Moore Bros. Investment Co., with Oscar E. Moore, president; Fred I. Moore, vice-president, and Arthur Moore, secretary. Capital is \$250,000.

Lecompte—Saw-mill.—C. L. Hardy will erect saw-mill.

New Orleans—Distillery.—It is reported that M. De Focatis of France, owner of a process for converting molasses into alcohol, and represented in the United States by Palestine & Co. of New York, will erect \$150,000 plant at New Orleans.

New Orleans—Ice Factory.—Pelican Ice Co. will erect new factory for doubling present capacity.

New Orleans—Telephone System.—Harvey Myers of Memphis (Tenn.) Telephone Co., which is constructing lines to Mississippi, will apply for franchise to extend into New Orleans.

New Orleans—Machinery Works.—Bancroft, Ross & Sinclair, machinery manufacturers, contemplate erecting new plant.

New Orleans—Mercantile.—Chartered: Pine Island Mercantile Co., Limited, with capital of \$10,000, by Ernest M. Loeb and others.

New Orleans—Chemical Plant.—International Chemical Co. has leased property at Port Chalmette and will erect large chemical works.

New Orleans—Wharf Sheds.—Dock board of the port of New Orleans contemplates erection of an extensive system of steel sheds along the river front and making other improvements for increasing facilities.

Shreveport—Saddlery.—Chartered: Shreveport Saddlery Co., Limited.

St. Martinsville—Electric Plant and Water-works.—City will issue \$25,000 of bonds for construction of water-works and electric-light plant recently mentioned. Address H. P. Fournet, chairman.

Thibodaux—Cannery.—Thibodaux Preserving Co. has been organized, with capital of \$10,000, for conducting general canning business.\*

#### MARYLAND.

Baltimore—Distillery.—Jackson C. Gott has completed plans for proposed addition to building of Gottschalk Distilling Co.; will be six stories, 52x50 feet.

Baltimore—Showcase and Store-fixture Factory.—Reinle-Salmon Company has been incorporated, with capital of \$50,000, for manufacture of showcases and store fixtures, by August Reinle, John Salmon, Albert Nagle and others.

Baltimore—Sulphur Company.—Hancock Liquid Sulphur Co. has been incorporated, with capital of \$250,000, by Abram O. Hancock, Robert N. Menefee and Harry L. Denny.

Baltimore—Brick Works.—Howard Clay Manufacturing Co. will be chartered under New Jersey laws, with capital of \$250,000, for manufacturing pressed and sand brick; site of sixty-five acres is said to have been purchased. Emory V. Donaldson, Chas. G. Edwards, Robt. Penning, Jr., W. J. Miller and others are incorporators.

Baltimore—Warehousing.—Baltimore Fidelity Warehouse Co. has been incorporated, with capital of \$250,000, for cotton and general storage warehousing. Albert G. Ober is president; Thomas M. Berry, treasurer, and T. E. Witters, secretary and manager; offices in Fidelity Building.

Baltimore—Bakery.—Superior Baking Co., 129 South Eden street, has completed its organization, electing John W. Cruett, president; Louis Sinsheimer, vice-president, and Roland B. Cruett, secretary. Capital is \$45,000. Plant is established.

Baltimore—Delivery Company.—Chartered: Citizens & Merchants' Parcel Delivery Co., with capital of \$25,000, by Edgar J. Stevens, Chas. E. P. Holbein, John Singleton and others.

Baltimore—Sailing-appliance Company.—United States Sailing Appliance Co. has been chartered to manufacture sailing appliances of all kinds. Capital is \$50,000, and incorporators include John C. Lewis, W. H. Lewis, C. T. Thomas and Harvey B. Fowler.

Boys—Elevator.—Bowman Bros. will let contract for erection of their proposed \$1800 grain elevator.

Cambridge—Can Factory.—I. L. Leonard & Co. will establish tin-can factory with capacity of 30,000 cans per day of ten hours. No contracts have been awarded.\*

Cambridge—Cannery.—James C. Johnson and William H. Radcliffe have purchased I. L. Leonard Packing Co.'s factory, and will operate same, erecting new building and making other improvements, which will increase capacity from 25,000 to 50,000 cans per day.\*

Crellin—Saw-mill.—Preston Lumber & Coal Co. will rebuild its saw-mill, burned at loss of \$45,000.

Germantown—Grain Elevator.—Bowman Bros. will erect 5000-bushel grain elevator.

Mt. Savage—Coal Mines.—Cumberland (Md.) Basin Coal Co. has purchased for de-

velopment 335 acres of additional coal lands near Mt. Savage.

Mt. Savage—Foundry.—Union Mining Co. will rebuild its foundry, lately burned at loss of \$15,000.

Rising Sun—Feldspar Quarries.—Matthew and John Ingram of Baltimore, Md., have purchased feldspar properties near Rising Sun from Baltimore Feldspar Co., also Keystone quarry, and will organize Sparvetta Mining Co. to operate the plants on larger scale.

Rockville—Overall Factory.—The establishment of overall factory is talked of. W. B. Burdette and Washington Hicks are interested.

Snow Hill—Butter-dish and Basket Factory.—Snow Hill Butter Dish & Basket Manufacturing Co. has been organized, with Oliver D. Collins, president; A. D. Irwin, secretary, and John H. Layton, general manager. Building 60x125 feet will be erected. Address general manager.\*

Towson—Brick and Land Company.—Chartered: Woodland Land & Brick Co., by Michael J. Gaff, John F. Evans, William Leyshon and others.

Towson—Brick Works.—Andrew Selbert, Frank Debelius and others have incorporated Independent Brick Co., with capital of \$50,000.

Washington, D. C.—Piano Company.—Chartered: Harry H. Juerg Co., with capital of \$25,000, for dealing in pianos and musical instruments. Harry L. Juerg is president; Walter E. Jordan, secretary.

Washington, D. C.—Mercantile.—Chartered: Central Mercantile Co., with capital of \$50,000, for dealing in supplies for hotels, etc., by W. S. Clark, Francis Clark and Wm. L. Van Derzee.

Washington, D. C.—Coal Company.—Consolidated Coal & Transportation Co. has been incorporated, with capital of \$300,000, for conducting mining and transportation business, by James A. Black, Charles Embrey, Virgil M. Fookes and others.

Washington, D. C.—Street-cleaner Company.—International Sanitary Street Cleaner Co. has been incorporated, with capital of \$300,000, to manufacture street-cleaning and snow-removing carts and wagons. Charles W. Plimper, Chas. P. Ravenburg and Anthony Galesky are incorporators.

Westminster—Gas Works.—Westminster Gas Light Co. will install machinery for doubling capacity.

#### MISSISSIPPI.

Bucatanua—Cotton Mill.—It is proposed to establish a cotton mill, and M. A. Hooge is interested.

Charleston—Brick Works.—Charleston Improvement & Investment Co., recently reported incorporated with capital of \$10,000, will establish plant for manufacture of bricks.\*

Collins—Electric Plant and Water-works.—Collins Light & Power Co., recently reported as being organized for construction of water-works and electric-light plant, has completed organization, with capital of \$10,000, and W. R. Holloway, president; A. V. Easterling, vice-president; W. U. Corley, secretary, and J. D. Kervin, treasurer.

Corinth—Road Improvements.—Alcorn county will issue \$10,000 of bonds for road improvements. Address "County Clerk."

Greenwood—Buggy and Wagon Factory.—Langstaff Wagon Co. has been incorporated, with capital of \$50,000, for manufacturing buggies, wagons, etc., by E. L. Langstaff, C. A. Wilson, B. L. Jones and others.

Gulfport—Supply Company.—Chartered: Gulfport Supply Co., with capital of \$50,000.

Hazlehurst—Brick and Tile Works.—Theodore Granberry, A. H. Conn, John Massa and others are incorporators of Hazlehurst Brick & Tile Co., reported recently with capital of \$10,000.

Lake Cormorant (P. O. at Blythe)—Cotton-mill.—White Redford of Lake Cormorant, L. D. Whittaker and A. W. Whittaker of Memphis have incorporated company, with capital of \$55,000, for erection of cottonseed-oil mill.

Ocean Springs—Electric-light and Ice Plants.—Ocean Springs Ice & Electric Co. has completed organization, electing S. J. Anderson, president; H. F. Russell, vice-president, and L. A. Lundy, secretary. Capital is \$25,000, and contract for 10-ton ice plant has been awarded.

Pass Christian—Mercantile.—Chartered: Brant Mercantile Co., with capital of \$5000.

Poplarville—Mercantile.—Chartered: Moody Bros. & Smith, with capital of \$10,000.

Saratoga—Lumber Mill.—Saratoga Lumber Co. will increase capital from \$10,000 to \$25,000, as recently reported, and erect new dry-kilns, sheds, etc.

Sardis—Ice Plant.—Company is being organized for erection of 6 to 10-ton ice plant. D. L. Rush is interested, and may be addressed.

Tupelo—Hosiery Mill.—Ely Walker & Co. of St. Louis, Mo., will establish the hosiery mill reported last month, investing \$50,000.

#### MISSOURI.

Cameron—Water-works.—City contemplates constructing water-works system. Address "The Mayor."

Kansas City—Cold-storage Plant.—Kansas City Ice & Cold Storage Co. has commenced erection of cold-storage plant five stories high, 100x120 feet.

Kansas City—Realty Company.—Chartered: Tice Realty Co., by John A. Tice, J. H. Tinker and W. R. Richardson.

Springfield—Water-works.—Springfield Water-Works Co. contemplates making extensive improvements.

St. Louis—Drug Company.—Missouri Drug Co. has increased capital from \$2000 to \$3000.

St. Louis—Mercantile.—Chartered: Edward Cornet Grocery Co., with capital of \$30,000, by Edward Cornet and others.

St. Louis—Packet Company.—Eagle Packet Co. has been incorporated, with capital of \$100,000, by Turner T. Lewis, Henry W. Leyhe, Wm. H. Leyhe and others.

St. Louis—Machine Company.—Chartered: Netrograph Machine Co., with capital of \$100,000, by Ernest G. Rankin, Geo. O. Ferguson and J. Leland Boogher.

St. Louis—Realty Company.—Imperial Realty Co., with capital of \$9000, has been incorporated by Charles H. Tate, Benjamin Cunliff and Henry L. Haydel.

St. Louis—Livery and Express Company.—Chartered: Rialto Livery & Express Co., with capital of \$5000, by Charles Anderson and others.

St. Louis—Dental Manufacturing.—Chartered: John T. Noble Dental Manufacturing Co., with capital of \$50,000, by John T. Noble, R. J. Kuhn, E. C. Noble and others.

St. Louis—Grain Company.—American Grain Co. has been incorporated, with capital of \$25,000, by E. C. Simms and others.

St. Louis—Tea and Coffee Company.—Chartered: C. D. Gregg Tea & Coffee Co., with capital of \$250,000, by C. D. Gregg, M. J. McKenna, G. W. Robinson and others.

St. Louis—Machinery Works.—Ruemmel-Dawley Manufacturing Co. has increased capital, as recently reported, from \$125,000 to \$300,000; additions to plant are nearing completion, to include boiler shop, sheet-iron works and galvanizing shop.

St. Louis—Construction.—Chartered: Bonet Construction Co., with capital of \$6000, by Leo Bonet and others.

St. Louis—Shoe Company.—Chartered: Crescent Shoe Co., with capital of \$10,000, by Albert G. Baum, George W. Davis and others.

St. Louis—Building and Contracting Company.—Chartered: Althaus-Helm Building & Contracting Co., with capital of \$3000, by Jacob Althaus, John Helm and others.

Webb City—Zinc Mines.—Majestic Mining Co. is reopening an abandoned zinc mine on property near Webb City of Albert Kelly of New York.

#### NORTH CAROLINA.

Albemarle—Electric-light Plant and Water-works.—Albemarle Light & Water Co. has been organized, with capital of \$5000, for construction of water-works and electric-light plant. Edward Shedd of Providence, R. I., is president, and R. E. Austin, local representative.

Concord—Water-works.—Contracts have been awarded for city's proposed \$71,000 water-works system as follows: Laying of pipe to Guild & Co. of Chattanooga, Tenn., at \$10,510; building power-house, etc., R. A. Brown, at \$768; for furnishing pipe, Morgan Pipe & Foundry Co., Lynchburg, Va., at \$21,265.

Elizabeth City—Electric-light and Gas Plants, Water-works, etc.—Elizabeth City Sewerage Co., with capital of \$100,000; Elizabeth City Gas Co., with capital of \$75,000; Electric Light & Power Co., with capital of \$100,000, and Elizabeth City Water & Power Co., with capital of \$100,000, have been incorporated by Daniel B. Banks and Milton W. Offutt of Baltimore, Md., and Cornelius M. Ferebee of Elizabeth City. It was reported in issue of December 25 that the Electric Light Co. of Elizabeth City would install complete water-works, sewerage system, gas plant for light and fuel and remodel present electric-light plant. D. B. Banks was also reported at the time as advisory engineer, and no contracts had been awarded. The above companies are in all probability formed for making the proposed improvements.

Greensboro—Mercantile.—Chartered: Rosenblatt & Co., with capital of \$25,000, by J. B. Carr, C. M. Bereh and others.

Hickory—Cotton Mill.—A. A. Shuford and associates, reported last week as to organize \$100,000 company to build cotton mill, will incorporate as Ivey Mills. Mr. Shuford will be president, and Geo. F. Ivey, manager.

Murphy—Water-power Development.—Alfred S. Emerson and associates will organize Cherokee Light & Power Co. to develop water-power near Murphy to generate electricity for manufacturing enterprises, etc. Communication with electrical and hydraulic engineers is desired.\*

Red Springs—Cotton-oil Mill.—Red Springs Oil & Fertilizer Co. is name of company reported recently as being organized to establish 20-ton cottonseed-oil mill. Capital is \$20,000.

Statesville—Cotton-oil Mill.—N. B. Mills and others are organizing \$20,000 company for establishment of cottonseed-oil mill.

Teachey—Telephone System.—Teachey Bell Telephone Co. has been incorporated, with capital of \$500, by J. C. MacMillan, J. B. Carr, C. M. Bereh and others.

Tryon—Overall and Shirt Factory.—F. P. Bacon is interested in the establishment of an overall and shirt factory.\*

Wilmington—Cooperage.—Atlantic Shingle, Cooperage & Veneer Co. has been incorporated, with capital of \$15,000, by W. A. Whitehead, W. G. Whitehead, A. H. Stocumb and others.

Wilmington—Bag Factory.—Willard Bag Manufacturing Co. will rebuild its bag and overall factory, burned at loss of about \$15,000.

Winston—Handle Factory.—Winston Handle Co., recently reported incorporated, will install additional machinery.

Winterville—Wagon Factory.—Winterville Manufacturing Co. has been incorporated, with capital of \$30,000, for manufacturing wagons, agricultural implements, etc., by W. J. House, L. L. Kittrell, A. D. Cox and others.

#### SOUTH CAROLINA.

Charleston—Brick Works.—Southern Hydraulic Brick Co. has been incorporated, with capital of \$25,000, by E. H. Jahaz, B. F. Kramer, D. Van Smith and William Saul.

Clinton—Knitting Mill.—It is proposed to establish knitting mill, and P. S. Dailey is interested.

Columbia—Water-power Development.—Northern parties have purchased the water-power near Amick's Ferry, on the Saluda river, and will develop same. Address Col. G. T. Graham.

Dillon—Cotton Mill.—Hamer Cotton Mills, reported last week, will build for 5000 spindles. Plans and specifications now being prepared; Wm. M. Hamer, president.\*

Donalds—Cotton-oil Mill.—Donalds Oil Mill Co. has been incorporated, with capital of \$15,000, by W. R. Dunn, J. J. Dunn, G. T. Hagon and others.

Fort Mill—Cotton Gin and Compress.—Z. T. Bailes will erect cotton gin and cotton compress.\*

Greenville—Cotton Mill.—Monaghan Mills, capitalized at \$450,000, will double its plant of 20,000 spindles and 700 looms. J. F. Grandy & Son have contract to erect extension to building; machinery has been purchased; J. E. Shirrine, engineer in charge.

Greenville—Mercantile.—Chartered: Stover-Hobbs-Henderson Company, with capital of \$10,000.

Greer—Electric-light Plant.—City will install 12 to 15 2000-candle-power arc-light plant. Address W. M. Ballenger, secretary.\*

Jonesville—Cotton Mill.—Alpha Cotton Mills will change name to Jonesville Manufacturing Co. and increase capital from \$100,000 to \$250,000. This company has 7000 ring spindles, and will acquire Jonesville Knitting Mills, a plant of 100 machines.

Lancaster—Water-works.—City contemplates constructing system of water-works at cost of \$18,000. Address "The Mayor."

Lockhart—Cotton Mill.—Lockhart Mills, reported December 18 as to erect another mill with capacity of 50,000 spindles and 1500 looms, has let all contracts for the improvements. Main building will be 130x450 feet, five stories high. Only 25,000 spindles and 750 looms will be installed at first. A complete water-works system and a steel bridge will be part of the improvements. Capitalization will be increased from \$50,000 to \$1,300,000.

Piedmont—Knitting Mill.—G. C. McEachern contemplates establishing knitting mill.\*

Rock Hill—Sewerage, etc.—George McDonald of New York and associates, who were reported January 29 as having purchased the

water-works, electric plant, etc., of Rock Hill Water, Light & Power Co. and to make extensive improvements, will also construct sewerage system.

Spartanburg—Wood and Iron Works.—Morgan Wood & Iron Co., reported recently as incorporated with capital of \$40,000 to continue Morgan Iron Works, which it had purchased, has completed organization with W. M. Jones, president and treasurer; W. S. Montgomery, vice-president and secretary. New machinery will be installed.

Waverly Mills—Supply Company.—Chartered: Waverly Supply Co., with capital of \$20,000, by Marks Moses and L. C. Lachcotte.

#### TENNESSEE.

Bolivar—Mercantile.—Chartered: Morrison-Rhodes Company, with capital of \$12,000, by R. K. Morrison and others.

Chattanooga—Plow Company.—Twentieth Century Plow Co. has been incorporated by M. T. Freeman, C. D. Mitchell, Judson Buchanan and others, and will lease the right to other companies to manufacture on royalties a gang plow invented by M. T. Freeman and O. F. James; capital \$75,000.

Chattanooga—Extract Wool Mill.—Extract Wool Merino Co., reported last month to increase capital \$20,000 for enlargements, will erect three-story additional building and install machinery, doubling its plant.

Chattanooga—Sand Quarry, etc.—Lookout Mountain Sand Construction Co. has been incorporated for manufacture of sand, concrete work, etc., by A. T. Boise, A. Kester, B. M. Tarver, M. S. Singleton and others. Company has purchased for development 10,000 acres of sandstone, and will erect plant for manufacture of cement and concrete for building purposes.

Chattanooga—Coal Mines.—Capital Coal Co., recently organized at Nashville, has floated about \$700,000 of bonds for the purpose of commencing extensive operations on its properties in Sequatchie and Grundy counties. Company owns 20,000 acres of coal lands, and will open up mines, build coke ovens, and probably steel plant.

Chattanooga—Metal Works.—Morris Sherman Manufacturing Co. (established) has been incorporated, with capital of \$50,000, to manufacture iron, steel and metal into marketable shape; Morris Sherman, Simon Glesmar, T. S. Lyons, W. B. Hughes and William Rodgers, incorporators. Company will enlarge plant by erection of boiler and machine shops at cost of \$25,000.

Chattanooga—Brick Works.—Spink-Gentry Brick Co. has been organized, with capital of \$40,000, and will erect plant with capacity of 40,000 bricks per day.

Chattanooga—Pump Works.—The company reported recently as organized by James Brady, D. P. Montague, H. S. Chamberlain and others for manufacture of steam pumps has incorporated as Herron-Brady Pump and Foundry Works, with capital of \$100,000. Adams & Beardon are preparing plans and specifications for plant, which will include machine shop, two stories, of brick, 70x150 feet, and foundry building of brick, iron and wood, 90x150 feet.

Columbia—Electric-light Plant.—Company will be organized for establishment of electric-light plant. John H. Carpenter is interested.

Cookeville—Electric-light Plant and Water-works.—City will petition legislature for authority to issue \$25,000 of bonds for water-works and electric lights. Address "The Mayor."

Gleason—Electric-light Plant.—R. J. Whitworth, manager of West Tennessee Mills, contemplates installation of electric plant for lighting city.

Jackson—Foundry.—Southern Engine and Boiler Works will build new foundry 80x120 feet, equipped with traveling crane and other machinery.

Johnson City—Electric-light Plant and Water-works.—Bill has been introduced in legislature authorizing issuance of \$10,000 for municipal ownership of water and lights, as recently reported. No contracts have been let, and nothing definite arranged; Jas. W. Crumley, mayor.

Keaton—Fruit-growers.—Chartered: Keaton Fruit-growers' Association, by H. T. Fullerton and others.

Knoxville—Textile Manufacturing.—Incorporated: Southern Textile Co., capital \$10,000, by W. L. Welcker, Henry Hudson, John F. Edington and others, for textile manufacturing.

Knoxville—Zinc Plant.—Detroit (Mich.) parties, including James T. Shaw, F. J. Caughey, James G. Anderson and George E. Smith, will, it is reported, reopen Roseberry Zinc Co.'s plant, and will expend \$20,000 on improvements.

Knoxville—Machine Works.—Chartered: Enterprise Machine Works, with capital of \$15,000, by William P. Richards, Arthur F. Richards, William D. Williams and others.

Lebanon—Fluor-spar Mines.—Tennessee Fluor-spar Co. will install \$5000 plant for mining and crushing fluor-spar.

Maury City—Mercantile.—Chartered: Maury City Dry Goods Co., with capital of \$6000, by H. G. Stallings and others.

Memphis—Conduit System, Power-house Improvements, etc.—Memphis Light & Power Co. will make extensive improvements, including further extension of its conduit system, at cost of \$100,000; will also duplicate present engine in power-house, which generates power supplying the city, and make other changes.

Memphis—Lumber Mills.—Lee Lumber Co. has increased capital from \$5000 to \$15,000.

Memphis—Mercantile.—Chartered: Fly & Hobson Co., with capital of \$100,000, by W. D. Fly and others.

Nashville—Supply Company.—Turnage-Harman Supply Co., with capital of \$7500, by J. C. Turnage, B. S. Harman and others.

Nashville—Trunk and Bag Factory.—White Trunk & Bag Co. contemplates erecting new factory for doubling its present output, which is about 2500 trunks a month.

Nashville—Gas Works.—Nashville Gas Co. will hold meeting March 11 to discuss increase of capital.

Nashville—Land Improvement.—Efforts are being made for the organization of a \$5,000,000 company to take over properties for improvement purposes, consolidating several land companies now in operation. Nashville Land Improvement Co. may possibly give information.

Ripley—Rolling Mill.—Ripley Rolling Mills has been incorporated, with capital of \$10,000, by W. R. Miller, Jas. A. Johnston, J. Y. Barbee, N. W. Mays and John A. Johnson.

Shelbyville—Lumber Mills.—Harry Parker of Tullahoma, Tenn., has purchased property of Bedford Lumber Co.

Tellico Plains—Saw-mill.—Percy Loomis and C. A. Scott of Chattanooga, Tenn., have purchased timber lands near Tellico Plains, and are erecting band-saw and planing mill.

Watertown—Real Estate, etc.—Watertown Immigration & Real Estate Association has been incorporated, with R. H. Baker, president; J. W. Maddox, secretary.

#### TEXAS.

Beaumont—Mercantile.—Chartered: John T. Ireland Co., with capital of \$100,000, by C. F. Ireland and others.

Beville—Land Cultivation.—John H. Pullin and M. A. Forbes of Kenedy, Texas, have purchased for cultivation 1000 acres of land near Beville.

Brownwood—Irrigation.—Chartered: Brown County Irrigation Co., by W. W. Cameron of Waco, Geo. H. Ingram of Brownwood and others.

Canyon City—Mercantile.—Nobles Bros. Grocery Co. has increased capital from \$50,000 to \$100,000.

Celina—Mill and Elevator.—Celina Mill & Elevator Co. has been incorporated, with capital of \$30,000, to operate cotton gins, presses, elevators, etc., by G. R. R. Smith, W. I. Bryan and B. F. Smith.

Cisco—Laundry.—McKinney & Connor are establishing steam laundry.

Cisco—Electric-light Plant.—E. Worrell has franchise for electric-light plant recently mentioned.

Cushing—Real Estate.—Cushing Land & Townsite Co. has been incorporated, with capital of \$10,000, by E. A. Blount, Charles Hay and T. J. Williams.

Dallas—Real Estate.—Chartered: Citizens' Real Estate Association, with capital of \$10,000, by J. F. O'Conner, Guy Sumter and D. W. Greer.

El Paso—Shirt Factory.—Bargman Shirt & Overall Co. will increase capital from \$10,000 to \$20,000.

El Paso—Land Improvement.—C. M. Meeker of Boston, Mass., has purchased 145,000 acres of land in El Paso county from John J. Myers of San Antonio, and will improve same as cattle ranch; property also contains salt mines, which may possibly be developed.

Floresville—Electric Plant and Water-works.—City will hold election April 22 to vote on issuance of \$15,000 of bonds for water-works and electric-light plant recently reported. Address "The Mayor."

Fort Worth—Machine Shops.—Texas & Pacific Railway Co. contemplates remodeling and enlarging its Fort Worth shops; L. S. Thorne, general manager, Dallas, Texas.

Houston—Oil Company.—Rio Bravo Oil Co. has been incorporated, with capital of \$1,000,

000, by Charles H. Markham, J. M. Miller, W. G. Van Vleet and others.

Houston—Glass Company.—Houston Glass Co. has increased capital from \$10,000 to \$20,000.

Houston—Water Supply.—Houston Heights Water Co. has been incorporated, with capital of \$50,000, by A. M. Carter, J. A. Milroy and A. McKinney.

Lampasas—Mining.—Lampasas Oil & Mining Co., with capital of \$100,000, has been incorporated by J. W. Moseley and T. W. McKnight.

Marlin—Cannery.—Falls County Canning & Manufacturing Co. will apply for charter.

Midlothian.—Chartered: Midlothian Cotton Yard Co., with capital of \$200, by W. W. Major, S. J. Martin and T. C. Perry.

Orange—Sash, Door and Blind Factory.—Proposition has been made for establishment of \$15,000 sash, door and blind factory and planing mill. Address secretary Progressive League.

Orange—Paper Mill.—R. Thomas is investigating with a view to establishing another paper mill.

Ringgold—Ferry.—Chartered: Wilmoth Ferry Co., with capital of \$4000, by A. W. Wilmoth, J. H. Lewman and T. W. Lewman.

San Antonio—Lock Works.—Chartered: Katzenberger Keyless Lock Co. has been incorporated, with capital of \$25,000, for manufacturing locks, etc., by Oscar Katzenberger, Louis E. Dorles, O. F. W. Hesse and others.

Seguin—Hardware Company.—Chartered: Vivroux Hardware Co., with capital of \$50,000, by Chas. J. L. J. and O. Vivroux.

Sweetwater—Cotton-oil Mill.—David Boaz of Fort Worth, Texas, is organizing \$50,000 company for erection of cottonseed-oil mill.

Texarkana—Street Improvements.—City has voted issuance of \$30,000 of bonds for street improvements. Address "The Mayor."

Victoria—Rice Cultivation.—S. E. Davis, president Monitor Disc Drill Manufacturing Co., Minneapolis, Minn., has purchased rice farm of 2635 acres from J. D. Russ, and will improve same, planting about 300 or 400 acres in rice.

#### VIRGINIA.

Alexandria—Electric-light Plant.—City contemplates installing incandescent electric-light plant. Address "The Mayor."

Berkley—Box Factory.—Henry Mayo Box Co. has been incorporated, with capital of \$25,000, for lumber and box manufacturing; Henry Mayo of Berkley, president; W. W. Tunis of Norfolk, vice-president; Leroy Tunis of Norfolk, secretary.

Brooks—Saw-mill.—Mr. Reed of Washington, D. C., who recently purchased timber properties near Brooks, will erect saw-mill for developing same.

Buchanan—Tin-can Factory.—O. C. Hoffman, reported recently to establish tin-can factory, has, with others, incorporated Virginia Can Co.; O. C. Hoffman, president; J. Z. Schultz, secretary and treasurer.

Christiansburg—Water-works.—City is advertising for bids for franchise for water-works and for supplying power to the electric-light plant. Address E. S. Hagan, clerk.\*

Danville—Cotton Mill.—Dan River Power & Manufacturing Co. has let contract to Geo. B. Hinman, Atlanta, Ga., for erection of weave shed 130x547 feet, saw-tooth roof, and for clothhouse 75x200 feet, three stories high, all of brick and best modern design. (Details as to mill were reported some months ago. There will be two mills to have 50,000 spindles and 2400 looms.)

Dayton—Knitting Mill.—J. H. Ruebush contemplates installing hosiery or underwear knitting machinery.\*

Elkton—Copper Mines.—High Top Mining Co., Morris D. Brown, president, contemplates erecting smelters at its copper mines near Elkton.

Fredericksburg—Laundry.—Chas. I. Stengle contemplates establishing steam laundry.\*

Fredericksburg—Shoe Factory.—Kenmore Shoe Co., Charles J. Green, president, will increase capital to \$200,000 and enlarge its factory.

Kinsale—Cannery.—Warren Courtney is erecting cannery.

Lynchburg—Water-works.—Engineer from New York has been employed to take charge of city's proposed plant to secure water supply by gravity. An expenditure of \$500,000 will be involved. Address E. C. Hamner.

Newport News—Door-mat Factory.—W. W. Scott will establish factory for manufacturing his patent door mat.

Norfolk—Sand and Gravel Company.—Chartered: Virginia Sand & Gravel Co., with authorized capital of \$50,000, to conduct lime, brick, cement and plaster business. C. M. Nottingham is president; N. Dalby, vice-



president; F. N. Smith, Jr., secretary and general manager.

**Norfolk—Ice Factory, Heat and Power Plant.**—Norfolk Cold Storage & Ice Co. has been incorporated, with capital of \$300,000, for manufacturing ice and to furnish heat and electric power through conduit system. R. B. Fentress of Norfolk is president; E. B. Bond of Baltimore, Md., vice-president, and B. W. Lee of Norfolk, secretary-treasurer.

**Norfolk—Lighting.**—Contract for lighting the city for four years has been awarded to Norfolk, Portsmouth & Newport News Co.

**Portsmouth—Chemical Company.**—Hunter Chemical Co. has been incorporated, with capital of \$50,000, to manufacture chemicals and by-products. H. Blunt Hunter is president; Frank P. Hunter, vice-president, both of Portsmouth; E. W. Goodwyn of Norfolk, secretary, and F. E. Wilcox of Norfolk, treasurer.

**Portsmouth—Lumber Mill.**—Dickson Lumber Co. of Asheville, N. C., will remove its plant to Portsmouth.

**Reedville—Cannery.**—Sunny Bank Canning Co. is establishing cannery. Geo. W. Reed is the architect.\*

**Reedville—Telephone System.**—Northern Neck Telephone Co. is extending its line from Reedville to Fleeton.

**Richlands—Coal Mines.**—John K. Ewing of Uniontown, Pa., and A. H. Reeder of Toms Creek, Va., have purchased 11,000 acres of coal lands, and will develop mines.

**Richmond—Envelope Factory.**—Union Envelope Co. has purchased factory of Johnson Duplex Envelope Co., and will install machinery for increasing capacity, which at present is 400,000 envelopes per day. I. L. Rheutan of Worcester, Mass., will have charge of plant.

**Richmond—Water-works and Sewerage.**—Barton Heights will issue \$10,000 of bonds for construction of water-works and sewerage system. Contracts have not been let. Address "The Mayor."

**Windsor—Pickle Factory.**—J. Weller contemplates establishing \$15,000 pickle factory.

#### WEST VIRGINIA.

**Adamston—Coal Mines and Plants.**—It is reported that Fairmont Fuel Co. has purchased 1200 acres of surface and 3000 acres of Pittsburgh coal from Perry Coal & Coke Co.

**Berkeley Springs—Sand Quarries.**—Jas. C. Gittings, Henry N. Hanna, Richard K. Cross, Willis E. Myers and Winter W. Myers, all of Baltimore, Md., have incorporated West Virginia Sand Co., with capital of \$100,000, for developing sand quarries, mining minerals, etc.

**Bluefield—Fuel Company.**—Flat-Top Fuel Co. has been incorporated, with authorized capital of \$30,000, by D. M. Ensley, A. S. Booker, S. S. Cofer and others.

**Boomer—Coal Mines.**—M. A. Hanna & Co. of Cleveland, Ohio, and associates have purchased the entire stock of Boomer Coal & Coke Co., and the mine at Boomer, W. Va., will be operated under direction of M. A. Hanna & Co.

**Charleston—Mercantile.**—Chartered: People's Grocery Co., with capital of \$1000, by W. O. Lee and others.

**Charleston—Oil and Gas Wells, etc.**—Kiliter Development Co. has been incorporated, with authorized capital of \$10,000, for developing oil and gas wells, etc., by W. S. Lewis, C. K. McDermott, Malcolm Jackson and others.

**Charleston—Electric-light, Gas and Water-works Plants.**—The Davis-Elkins syndicate, reported recently as having purchased the water-works, electric-light and gas franchises at Charleston, has incorporated Kanawha Water & Light Co., with capital stock of \$1,000,000, and privilege of increasing to \$2,000,000. Richard Elkins of Washington, D. C., is president; W. F. Sadler, Jr., of Trenton, N. J., secretary-treasurer; Stephen B. Elkins and Colin H. Livingstone of Washington, D. C., and Chas. W. Swisher of Fairmont, W. Va., together with officers, form board of directors. Company's office will be located for present in Washington, D. C.

**Eagle—Coal Mines, Coke Ovens, etc.**—Gordon Coal & Coke Co. has been incorporated, with capital of \$500,000, for developing coal mines, manufacturing coke, etc., by William S. Haskett, Anson McC. Beard, John D. Fearlake and others, all of New York city.

**Fayetteville—Coal Mines.**—Grose Colliery Co. has been incorporated, with authorized capital of \$50,000, for developing coal mines, by J. T. Grose, A. W. Hamilton, C. W. Dillon and others.

**Fayetteville—Coal Mines.**—Plum Orchard Coal Co. has secured 4000 acres of coal lands, and will develop same.

**Gauley Bridge—Mining.**—Miller Mining Co.

has been incorporated, with capital of \$100,000, by J. H. Miller, R. H. Miller, W. H. Hill and others.

**Keyser—Furniture Company.**—Richardson Furniture Co. (established) has incorporated, with capital of \$50,000, and M. G. Richardson, president; John C. Wilson, vice-president; R. G. Richardson, secretary.

**Littleton—Milling.**—Chaney Milling Co. has been incorporated, with capital of \$12,000, by Hiram Chaney, S. A. Chaney, Harry Wines and others.

**Morgantown—Coal Mines.**—Elk Garden Coal Co., composed of Stephen B. Elkins of Elkins, W. Va., and sons, will change its name to West Virginia Coal Co., its office from New York to Morgantown, and increase capital from \$30,000 to \$60,000.

**New Martinsville—Fuel Gas Company.**—United Fuel Gas Co. has been incorporated, with capital of \$1,000,000, by H. B. Myer, R. T. Rossell, J. G. Frazer, D. A. Reed and others, all of Pittsburgh, Pa.

**Parkersburg—Pottery.**—South Side Pottery Co. has been incorporated, with capital of \$24,000, by H. B. Stout, W. S. Kever, E. G. Stephenson and others.

**Parkersburg—Stovepipe Works, etc.**—Budke Manufacturing Co. of Cannonsburg, Pa., manufacturers of stovepipe and other articles made from sheet iron and steel, will remove its plant to Parkersburg.

**Parkersburg—Foundry, etc.**—Kenova Supply Co. has been organized, with capital of \$100,000, for manufacture of oil and gas-well tools, mining implements, etc. S. A. Risher of New Martinsville is president; B. McIntyre of Salem, vice-president; W. D. Moore of Parkersburg, secretary.

**Parkersburg—Mining.**—Chartered: Peerless Mining Co., with capital of \$75,000, by J. M. Smith, Edgar N. Smith, Geo. P. Jarvis and others.

**Philippi—Coal Mines.**—Union Coal & Coke Co., with capital of \$25,000, has been incorporated by H. I. Spellberger, C. H. Sturgis of Barryburg, W. Va.; Fred O. Blue of Philippi and others.

**Philippi—Real Estate.**—Philippi Real Estate Co. has been incorporated, with capital of \$25,000, by M. C. Talbot, T. B. Bowman, S. H. Bowman and others.

**Wheeling—Mercantile.**—Chartered: Jacob Snyder's Sons Co., with capital of \$150,000, by Benj. F. Snyder and others.

**Wheeling—Transfer Company.**—Burns & Church Transfer Co. has been incorporated, with capital of \$10,000, by Frank Church, W. H. Burns, George Stamm and others.

**Wheeling—Metal Ceiling Works.**—Arrangements are being made to erect a \$500,000 plant, at which is to be concentrated the bulk of the metal ceiling interests of the country. Capital stock of new corporation will be \$5,000,000. Included in the companies interested are Caldwell & Peterson Co., Wheeling Corrugating Co., National Roofing & Corrugating Co., Whitaker Mills and the Laughlin Company.

**Wheeling—Machine Shops.**—Henry E. Weisgerber and Charles Ebeling have purchased machine shop of Redman & Co., and will operate as Weisgerber & Ebeling Machine Co.

#### INDIAN TERRITORY.

**Holdenville—Printing.**—Chartered: Times Printing Co., with capital of \$3500, by Ben F. White, L. Walker, I. Singleton and others.

**Holdenville—Water-works.**—W. W. Cook & Son of Junction City, Kan., have contract for constructing city's proposed system of water-works.

**Shawnee—Cannery.**—Chartered: Shawnee Canning Factory, with capital of \$10,000, by W. J. Estes, Henry G. Beard, F. G. Stearns and others.

**South McAlester—Water-works.**—Contract for constructing water-works system recently reported has been awarded at \$122,100. Address "The Mayor."

**Tablequah—Electric-light Plant.**—C. W. Turner of Muskogee, I. T., has franchise for installation of electric-light plant.

#### OKLAHOMA TERRITORY.

**Enid—Feed Trough Company.**—Chartered: Oklahoma Feed Trough Co., with capital of \$12,000, by John Conklin of Marshall, Newton Burwell of Enid and others.

**Geary—Water-works.**—City has voted \$52,000 of bonds for water-works, as recently reported, and is advertising for bids for construction of complete system. C. L. Olds of Fort Wayne, Ind., is consulting engineer; A. T. Kruse, mayor.\*

**Oklahoma City—Carriage Factory.**—Oklahoma City Axle & Carriage Manufacturing Co. has been incorporated, with capital of

\$25,000, by W. T. Urie, A. A. March, Thomas Keyes and others.

**Oklahoma City—Oil and Gas Wells.**—Efforts are being made to form company to bore for oil, gas and artesian water. Address H. W. Peters or S. E. Bowers, who are interested.

**Shawnee—Transfer Company.**—Chartered: Esleek Bros. Transfer Co., with capital of \$5000, by W. G. Esleek and others.

**Stroud—Electric-light Plant and Water-works.**—Construction of water-works system and erection of electric-light plant is talked of. Address Secretary Commercial Club.

#### BURNED.

**Loyd, La.—Loyd Sugar & Molasses Co.'s sugar plant;** estimated loss \$65,000.

#### BUILDING NOTES.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

**Abbeville, Ga.—Courthouse.**—George F. McLeod, chairman commissioners of roads and revenue, will open bids May 4 for erection of Wilcox county's \$50,000 courthouse. Plans and specifications on file in chairman's office and at office of Architect Frank P. Milburn, Columbia, S. C. Building will be three stories and basement, of brick, stone, terra-cotta, steel, iron, yellow pine, slate, etc. Certified check for \$3000 must accompany each bid. Bond required and usual rights reserved.

**Abbeville, La.—Hotel.**—Desire Trahan of Abbeville and J. Janbert of New Orleans will erect three-story brick hotel to cost \$30,000.

**Adairsville, Ga.—Residence.**—R. L. McCollum has not engaged architect nor awarded any contracts for his \$5000 dwelling recently reported.

**Aiken, S. C.—Hotel.**—Aiken Hotel & Improvement Co. has had plans made by Alfred H. Hopkins, 111 Fifth avenue, New York, N. Y., for erection of hotel recently reported; building will be four stories, of brick, lighted by electricity, heated by steam and equipped with all modern improvements. No contracts have been awarded.\*

**Alexandria, Va.—Custom-house and Post-office.**—Paravinal & Greer were lowest bidders for erecting addition to custom-house and postoffice. Bid was \$61,200. All the estimates were in excess of appropriation.

**Angleton, Texas—Business Block.**—W. A. Nelson has contract for rebuilding Raymond block.

**Asheville, N. C.—Depot.**—Frank P. Milburn, Columbia, S. C., will prepare plans and specifications for union station for Southern Railway Co.; C. H. Ackert, Washington, D. C., general manager.

**Athens, Ga.—City Hall.**—Plans of L. F. Goodrich of Augusta have been accepted for proposed city hall; building will be three stories and cost \$40,000.

**Athens, Ga.—University Building.**—J. A. Shye has contract for erecting three-story \$20,000 college building for University of Georgia.

**Atlanta, Ga.—Church.**—First Christian congregation will erect \$25,000 edifice. Address "The Pastor."

**Baltimore, Md.—School.**—U. L. Stockhausen is the lowest bidder on erection of school-house at Mount and Saratoga streets. Bid was \$47,357.

**Baltimore, Md.—Building.**—George A. Blake has contract for erecting proposed addition and remodeling Hampden Hall building after plans by J. A. Wilson; addition will be one story, 94 feet long.

**Baltimore, Md.—Store Building.**—Contract will be awarded shortly for proposed improvements of Hochschild, Kohn & Co. Plans were prepared by Joseph Evans Sperry, and call for five-story building 44x60 feet.

**Baltimore, Md.—Warehouse.**—Cecl Distilling Co. will erect five-story warehouse 50x100 feet, with capacity for 10,000 barrels of liquor.

**Baltimore, Md.—Warehouse.**—Ellicott & Emmart have completed plans and are taking estimates on erection of eight-story warehouse of James E. Ingram, previously reported; building will be of brick, terra-cotta and steel construction, tile floors, etc., 23x30 feet.

**Baltimore, Md.—Hotel.**—E. M. Noel will receive contract for erecting proposed five-story brick structure to replace old Hotel Baltimore. Edward H. Glidden prepared the plans.

**Baltimore, Md.—Residence.**—McIver & Piel have contract for erecting three-story brick

and wooden residence for Paul Rosazza. Robert Milker prepared plans.

**Baltimore, Md.—Residence.**—Thomas L. Jones & Son and George Blake are preparing estimates on erection of two-story brick addition to cost \$15,000 to residence of William T. Wilson.

**Baltimore, Md.—Apartment-house.**—Margill Construction Co. has been incorporated for erecting four-story apartment-house on Lafayette avenue. J. E. Lafferty has prepared the plans, and will ask for bids at once.

**Baltimore, Md.—Temple.**—James William Arthur has contract for erecting Masonic temple at Arlington, previously reported.

**Baltimore, Md.—Dwellings.**—Frank Novak will erect twenty-four two-story dwellings. T. Milton Jones will erect twenty-four two-story brick dwellings to cost \$24,000.

**Beaumont, Texas—Office Building.**—Thos. Brown, cashier Park Savings Bank, has let contract for erection of \$20,000 steel-frame building adjoining present bank.

**Belton, Texas—Opera-house.**—Chartered: Grand Opera House Co., with capital of \$3000, by J. E. Ferguson and others.

**Birmingham, Ala.—Coliseum.**—Elks will build \$10,000 coliseum.

**Birmingham, Ala.—Business Building.**—J. B. Carr & Co., 15 Watts Building, are preparing plans for four-story brick, stone and terra-cotta building for H. L. McConnell, to be 75x140 feet, with steel beam girders, cast-iron columns, plate glass, metal cornice, gravel roofing, plumbing fixtures, four elevators, etc., and cost \$30,000. Bids for erection will be received until March 15.

**Catonasville, Md.—Church.**—Werner Bros. of Ellicott City, Md., have contract at \$15,000 for erecting Lutheran church at Catonasville, previously reported.

**Chattanooga, Tenn.—Business Block.**—Frank Whiteside has contract for erection of \$5000 business block to be built by Tennessee Iron & Metal Co.

**Chattanooga, Tenn.—Church.**—Plans and specifications have been completed by R. H. Hunt for proposed \$11,000 edifice to be erected by St. James' Methodist Episcopal Church, and bids will be called for at once.

**Chester, S. C.—Hospital.**—H. E. White, Rock Hill, S. C., has prepared plans for hospital for Dr. S. W. Pryor at Chester, to be of frame, with metal laths, shingle roof, and to have electric lights, steam heat, etc. Bids will be opened April 1 on erection.

**Dallas, Texas—Car Barn.**—Dallas Street Railway Co., J. P. Clark, general manager, will erect \$75,000 car barn.

**Dublin, Texas—City Hall, etc.**—City will build \$5000 city hall and fire station, two stories, 40x80 feet. Address "The Mayor."

**Fort Smith, Ark.—Courthouse Extension.**—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will receive sealed proposals until March 10 for construction (except heating and elevator) of extension to United States courthouse, postoffice, etc., at Fort Smith, in accordance with drawings and specifications on file at above office or at office of custodian at Fort Smith.

**Frederick, Md.—Store Building.**—Louis Levy of Baltimore will prepare plans for erection of three-story brick and stone store building for Rosenstock Bros. Electric elevator will be installed, steam heat, etc.

**Galveston, Texas—Temple.**—J. H. Butler has contract at \$4500 for erecting Hebrew temple.

**Girard, Ala.—School.**—City will erect \$10,000 school building; John R. Garrett, mayor.

**Glen Echo, Md.—Church.**—Episcopallians contemplate erecting church. Address W. H. Roach.

**Guilford, Miss.—Courthouse.**—M. T. Lewman & Co. of Louisville, Ky., have contract for building proposed \$38,000 courthouse at Guilford.

**Hamilton, Texas—School.**—City will erect \$7000 schoolhouse. Address "The Mayor."

**High Point, N. C.—Residence.**—E. M. Armfield will erect \$10,000 residence.

**Houston, Texas—Lodge and Business Building.**—Odd Fellows will organize \$30,000 stock company for erecting three-story brick lodge and business building 40x30 feet, to cost \$20,000.

**Huntsville, Ala.—College.**—Chartered: Chafin's Business College, with capital of \$10,000, by Professor Chafin and others.

**Hyattsville, Md.—Power-house.**—D. W. Thomas has contract for erecting the proposed power-house of Baltimore, Washington & Annapolis Electric Railway Co. after plans by Cleveland Construction Co. of Akron, Ohio. Building will be one story, of brick, stone and iron, 128x162 feet, and cost \$40,000.

Jacksonville, Fla.—Library.—Trustees Jacksonville Free Public Library invite architects to furnish sketches and plans until April 30 for proposed new library building. General terms under which plans will be received can be had upon application to J. R. Parrott, president.

Knoxville, Tenn.—Station.—Official plans have been submitted for proposed \$130,000 passenger station of Louisville & Nashville Railroad Co.; George E. Evans, general manager, Louisville, Ky.

Lake Charles, La.—City Hall.—N. A. Dawson of Orange, Texas, has contract for erecting Lake Charles' proposed city hall.

Lynnville, Tenn.—Church.—Methodist congregation will have plans made for new edifice. Address "The Pastor."

Mineral Wells, Texas.—City Hall.—City hall and fire station will be erected. Address "The Mayor."

Monroeville, Ala.—Courthouse.—Plans and specifications of Andrew J. Bryan & Co. of New Orleans, La., have been adopted for erection of courthouse recently reported. Contract will be let April 16.

Newberry, S. C.—College.—Newberry College, George B. Cromer, president, has had plans made for erection of additional building to cost between \$16,000 and \$20,000.

New Orleans, La.—Theater.—Baldwin-Fourton Theatrical Co., Limited, has been incorporated, with capital of \$250,000, for erection of opera-house, by H. C. Fourton, Walter S. Baldwin and others.

Norfolk, Va.—Apartment-house.—E. Tatterson has contract at \$29,305 for erection of Arthur Morris' proposed apartment house.

Norfolk, Va.—Church.—Norfolk Baptist Church contemplates erecting new edifice; Rev. P. S. C. Davis, pastor.

Oklahoma City, Okla.—Church.—St. Paul's Episcopal Church will erect brick and stone structure to cost \$15,000. Address "The Pastor."

Piedmont, W. Va.—Store Building.—W. T. Jamieson is having plans and specifications made for erection of three-story brick store building 48x46 feet.

Richmond, Ky.—Postoffice Building.—Time for opening bids for completion of the United States postoffice building has been extended from March 23 to April 8; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C.

Sherman, Texas.—Hotel.—Sherman Catering Co., reported recently as incorporated, has organized for operating Binkley Hotel, now being remodeled after plans by John Tullock.

Spartanburg, S. C.—College.—John B. Martin has contract for erecting proposed science hall for Wofford College, previously reported to be built at cost of \$15,000. Plans were prepared by Avery Carter, and call for building 115x80 feet.

St. Augustine, Fla.—Hotel.—Ira C. Rinehart will erect new four-story brick hotel to have 200 rooms and cost about \$100,000. Architect has not been engaged nor contracts for building or machinery awarded. Address care of Zorayda Club.

Sweetwater, Texas.—Hotel.—Twenty thousand dollars has been subscribed for erection of hotel. Address J. W. Scott, mayor.

Texarkana, Ark.—Church.—Charles L. Thompson of Little Rock, Ark., has contract for erecting \$18,000 Methodist church.

Tunnelton, W. Va.—Hotel.—Company is being organized to erect \$10,000 hotel. Address "The Mayor."

Valdosta, Ga.—Residence.—J. N. Bray of Cecil, Ga., will erect \$25,000 brick residence.

Vidalia, Ga.—Hotel.—Matthews & Williams will erect brick hotel.

Vidalia, Ga.—Hotel.—Matthews & Williams will erect hotel, and have awarded no contracts nor engaged architect.

Wadesboro, N. C.—Business Building.—Leak & Marshall and W. P. Parsons have contracted with W. T. Brasington for erection of three-story brick and granite building 54x120 feet.

Washington, D. C.—School.—Paraviani & Greer were lowest bidders (\$22,539) on erection of public school building at Brookland, D. C.

Washington, D. C.—Residence.—A. P. Clark has prepared plans for three-story brick residence for Clifford Howard.

Washington, D. C.—Soldiers' Home Improvements.—Government contemplates expending \$700,000 in erecting new building and in improvements to Soldiers' Home; work includes erection of mess hall and dormitory to cost \$300,000; addition to hospital to cost \$60,000, and erection of \$50,000 administration building. William M. Poindexter is preparing plans for administration building and hospital addition. Work will be in charge

of Major Chauncey B. Baker, office quartermaster-general, War Department.

Waxahachie, Texas.—Depot.—Missouri, Kansas & Texas Railway system will, it is reported, erect depot; A. A. Allen, general manager, St. Louis, Mo.

Wellsburg, W. Va.—Church.—Franklin congregation will rebuild its church. Address "The Pastor."

Wheeling, W. Va.—Flats Building.—Alex. T. Young and John W. Keuple are having plans made for erection of flats building.

Wheeling, W. Va.—Apartment-house.—Eastern parties are investigating with a view to erecting large apartment-house. John M. Dauer of Wheeling may possibly give information.

Wilmington, N. C.—Tobacco Warehouse.—Wilmington Tobacco Warehouse Co. has awarded contract to W. E. Glenn for erection of warehouse lately reported; building will be one story, 100x200 feet; H. E. Bonitz prepared plans.

## RAILROAD CONSTRUCTION.

### Railways.

Augusta, Ga.—The Augusta & Columbia Electric Railway Co. has applied for a charter for an electric railway from Augusta, Ga., to Columbia, S. C., fifty miles. The incorporators are James U. Jackson, president of the Augusta-Aiken line; Walter M. Jackson of Augusta, Ga.; W. B. Smith Whaley, E. B. Clark and W. H. Lyles of Columbia, S. C., and Henry Buist of Charleston.

Baltimore, Md.—Work has begun at Frederick, Md., on the Baltimore & Frederick Electric Railway. Newhall & Co. of Baltimore are the contractors. James E. Ingram, Jr., of Baltimore is president.

Baltimore, Md.—It is reported that the Baltimore & Ohio Railroad Co. will build large yards near Shepherdstown, W. Va., on the proposed low-grade line between Harper's Ferry and Martinsburg. J. M. Graham is chief engineer at Baltimore.

Beaumont, Texas.—President H. J. Hopkins of the Beaumont, Port Neches & Port Arthur Electric Railway Co. is reported as saying that everything is now ready to resume work on the line.

Brunswick, Ga.—The Brunswick & Birmingham Railroad is reported to be building an extension from Nichols to Broxton, eighteen miles. L. W. Robert is chief engineer at Brunswick.

Burns, Tenn.—The Nashville, Chattanooga & St. Louis Railway has let a contract for \$1400 for grading the yards at Colesburg.

Chambersburg, Pa.—The Cumberland Valley Railroad is reported to have bought property at Hagerstown, Md., to double-track the line through that city. T. J. Brereton is engineer at Chambersburg.

Chicago, Ill.—It is reported that work will soon begin on the proposed new yards of the Illinois Central Railroad immediately south of Memphis, Tenn. H. U. Wallace is chief engineer at Chicago.

Chicago, Ill.—The Illinois Central Railroad is reported to be making another survey from Jackson, Tenn., to Tusculum, Ala., this route being via Henderson, and thence through Chester and McNairy counties, through the Shiloh National Park, and thence along the Tennessee river to Tusculum. H. U. Wallace is chief engineer at Chicago.

Joplin, Mo.—It is reported that a railroad will be built from Chanute, Kan., to Memphis, Tenn., with a total length of about 400 miles, under the name of the Arkansas, Missouri & Kansas Railroad, the route being via Chanute, Weir City and Cherokee, Kan.; Joplin, Neosho, Cassville and Gainsville, Mo., to Memphis, Tenn. W. D. Spooner is chief engineer at Joplin. The Santa Fe is reported to be interested.

Chihuahua, Mex.—David Shaw has the contract for fifty kilometers west of Minaca, on the Kansas City, Mexico & Orient Railway, and G. Webb of Parral has the contract on the second fifty kilometers east of Chihuahua.

Christiansburg, Va.—Tracklaying has begun on the new railroad from Christiansburg Depot to coal fields, four miles. The line will eventually be extended to Blacksburg.

Columbus, Ga.—The Birmingham, Columbus & St. Andrews Railroad has received its certificate of incorporation to build from Columbus down the Chattahoochee river through Alabama to the Gulf of Mexico at St. Andrews, Fla. The officers are W. Miller Gordon, president; James B. Huff, vice-president, and Donald B. Jones, secretary.

Connellsville, Mo.—It is reported that the Iowa & St. Louis Railroad has been sold to the Burlington system, and will be completed from Novinger to Macon, Mo. H. F. Reddig is president at Connellsville.

Eagle Lake, Texas.—President Jonathan Lane of the Cane Belt Railroad is reported as saying that the question of an extension into Houston will soon be considered by the company. C. H. Sharman is chief engineer at Eagle Lake.

Elk City, Okla.—The Oklahoma & Southern Railroad Co. has been chartered to build a railroad through Custer, Day and Roger Mills counties; capital \$600,000. The incorporators are Martin A. Lally, Little Rock, Ark.; John Overholt, Enid; Calvin Rosser, J. N. Cook, W. L. Mahoney and J. A. Mays, Elk City.

El Reno, Okla.—It is reported that construction work has begun on the St. Louis, El Reno & Western Railroad.

Granbury, Texas.—The Granbury & Glen Rose Traction Co. is being organized to build an electric line connecting the two towns. G. W. Landers, J. H. Doyle, D. O. Baker and others of Granbury and J. R. Milam, G. F. Galtner, T. J. Bryan and others of Glen Rose are interested.

Harrison, Ark.—The Ozark & Sulphur Mountain Traction Co. of Harrison has been organized, with \$600,000 capital, to build an electric line from Harrison to Keener, Bellefonte and Sulphur Mountain. It may be extended also to Jasper, Murray, Dodd City and Lead Hill. The incorporators are W. G. Gardiner of Toledo, Ohio, president; Allen Smalley of Upper Sandusky, Ohio, vice-president; John J. Gaghan of Harrison, Ark., secretary; Neal Dodd of Dodd City, Ark., treasurer; the other incorporators are Harold A. Oertling, James A. Flinn, C. M. Greene, John A. Bunch of Harrison, W. L. Cassady of Eureka Springs, W. S. Allen of Jasper, Wm. S. McK. Oertling of Pensacola, Fla.

Harrisonburg, Va.—A. A. Chapman and W. H. Rickard are reported to be making a survey for the Central Railway of Virginia, a proposed line to go through Dry River Gap.

Helena, Ark.—Mr. G. T. Updegraff, president of the Eastern Arkansas Railroad, is quoted as saying that work will begin about March 15 on the line, which is to be 110 miles long.

Houston, Texas.—It is reported that the Houston, East & West Texas Railway will lay heavier rails all the way from Houston to Shreveport, La., and will otherwise improve its line. A. V. Kellogg is engineer in charge of way at Houston.

Houston, Texas.—It is reported that the Southern Pacific will build an extension to Brownsville, Texas; E. B. Cushing is engineer in charge of way at Houston.

Huntington, Ark.—The Arkansas Coal & Mineral Railroad Co., recently incorporated to build from Hartford to Dyer via Huntington, about fifty miles, has been reincorporated, so that it may extend its lines a total distance of 175 miles through Sebastian, Crawford, Franklin, Johnson, Newton and Boone counties. The incorporators are John F. Williams and others of Huntington, Fort Smith and Waldron.

Jacksonville, Fla.—It is reported that the Central Florida & Indian River Railroad Co. will be incorporated to build a line from Melbourne to Orlando and Bartow, Fla., about 125 miles. E. O. Painter of Jacksonville, William T. Wells of Melbourne, Fla., and J. S. Jenkins, Jr., of New York are among the incorporators.

Joplin, Mo.—The Southwest Electric Railway Co. will, it is reported, build a line from Joplin via Chitwood to Clark Junction, ten miles.

Joplin, Mo.—The Mineral Cities Electric Railway is being built from Joplin via Chitwood, Columbus and other points to Pittsburg, Kan., with branches to Cherokee, Kan., and Minden Mines, Mo.; total length thirty-five miles.

Louisville, Ky.—It is reported that the Louisville & Nashville Railroad will build from Attalla, Ala., to Altoona, Ala., about twelve miles. R. Montfort is chief engineer at Louisville.

Macon, Ga.—Mr. J. T. Wright, vice-president and general manager of the Macon, Dublin & Savannah Railroad Co., writes to the Manufacturers' Record denying the report that the company will build an extension.

Monticello, Ky.—The Cumberland Valley Interurban Railway Co. has been incorporated to build an electric line from Monticello to Somerset, twenty miles. The incorporators are W. J. Loughridge, D. Gray Falconer, E. B. Ellis, Rudolph Harting, J. H. Carter, W. C. Goodloe, Jr., and E. P. Farrell.

Moorhead, Miss.—The Memphis & Gulf Railroad Co. has been incorporated to build a line from Memphis, Tenn., to Pensacola, Fla., with a branch to Mobile, Ala., making a total length of about 400 miles. The incorporators are Chester H. Pond of Moorhead, Miss.; Oliver F. H. Cornell, Charles H. Blair

and Alexander S. Lyman of New York and L. W. Moen of Newark, N. J.

Nashville, Tenn.—It is reported that the Tennessee Central Railroad will build extensive sidings at Crossville. W. N. McDonald is chief engineer at Nashville.

Nashville, Tenn.—Mr. Hunter McDonald, chief engineer Nashville, Chattanooga & St. Louis Railway, writes the Manufacturers' Record that a survey has been made for an extension from Tracy City, Tenn., to the mines of the Thomas Coal Co., and report has been made thereon. The matter is under advisement.

Oklahoma City, Okla.—The Oklahoma & Western Railway ("Frisco system") has been completed to Quannah, Texas.

Oklahoma City, Okla.—Tracklaying has begun on the Missouri, Kansas & Oklahoma Railway, of which F. N. Finney is president.

Oklahoma City, Okla.—The Texarkana, Oklahoma & Northwestern Railroad Co. has been chartered to build a line 1100 miles long from Texarkana, Texas, to Denver, Col.; headquarters at Oklahoma City.

Parkersburg, W. Va.—V. B. Archer, one of the incorporators of the Parkersburg & Ohio Valley Electric Railway Co., is reported as saying that the company will build from Williamstown to Moundsville, W. Va.

Pensacola, Fla.—The Pensacola Railway & Terminal Co. will, it is again reported, convert the dummy line running to Barrancas to an electric road.

Port Lavaca, Texas.—M. S. Mahon and others are interested in a movement to build a railroad from Port Lavaca to reach Angleton, Bay City and Refugio. A meeting is to be held at Port Lavaca on March 23 to consider the matter.

Portsmouth, Va.—It is reported that the Seaboard Air Line will build an extension from McBee, S. C., to Charleston, S. C., about 115 miles. W. W. Gwathmey, Jr., is chief engineer at Portsmouth.

Raleigh, N. C.—The legislature has passed bills to incorporate the Piedmont Central Railroad and the Reidsville, Yanceyville & Burlington Railroad.

Roanoke, Va.—Mr. Charles G. Churchill, chief engineer Norfolk & Western Railway, writes to the Manufacturers' Record as follows: "Contracts have just been let to the following parties for double-tracking and improving line, eight miles, between Welch and Davy: D. Shanahan & Co., M. P. 399 to 401.5; J. R. Serpell & Co., M. P. 401.5 to 407. Between Matewan & Naugatuck, twenty-five miles: M. N. Moorman & Co., M. P. 460, Matewan, to first bridge at Hatfield Bend, east of M. P. 462; Walton & Co., M. P. 462 to 470; Rosser, Coleman & Watts, 470 to 475 M. P.; E. G. Bowers & Co., M. P. 475 to 480; Eliason & Rhoades, 480 to 484.5, Naugatuck.

Russellville, Ark.—Mr. W. A. Baird, one of the incorporators of the Russellville & Dover Railroad, writes to the Manufacturers' Record that its line will be ten miles long from Russellville to Dover. Engineer not yet appointed.

Salisbury, Mo.—Surveys are reported completed on the St. Louis & Northwestern Railroad from Mokane, Mo., via Fulton, Columbia, Roanoke, Salisbury and Marceline to Brookfield, about 120 miles. J. H. Baker of Salisbury is president.

Savannah, Ga.—The Central of Georgia Railway is reported to be surveying for an extension to the new army post site at Chickamauga Park, near Chattanooga, Tenn. H. M. Steele is chief engineer at Savannah.

Savannah, Ga.—It is reported that the Central of Georgia Railway will spend \$50,000 to enlarge and improve its yards at Macon, Ga. H. M. Steele is chief engineer at Savannah.

Savannah, Ga.—It is reported that the Central of Georgia Railway will widen the gauge of the Columbus & Rome Railway. H. M. Steele is chief engineer at Savannah.

Shawnee, Okla.—The Santa Fe tracklayers are reported to have completed track as far as Clifton, fourteen miles north, and are coming toward Shawnee.

Southport, N. C.—Work has begun at Southport on the proposed Southport, Wilmington & Durham Railroad, with Clifford C. Pullen as engineer in charge. Horace G. Williams of Philadelphia, Pa., is the contractor. The road was chartered two years ago by the legislature, the incorporators being W. A. Guthrie, W. B. Guthrie and Thomas L. Peay of Durham, N. C.

St. Louis, Mo.—The issue of \$20,000,000 of 4 per cent. bonds by the St. Louis, Iron Mountain & Southern Railroad is said to be for the purpose of improving the terminal at St. Louis and for building extensions. H. Rohwer is chief engineer at St. Louis.

St. Louis, Mo.—It is reported that the Missouri Pacific will build a line from Gilbert,



La., to Lake Providence, La., as a branch of its proposed line to New Orleans. H. Rohwer is chief engineer at St. Louis.

Tifton, Ga.—The South Georgia & West Coast Railway has filed a mortgage to secure bonds, and will, it is reported, build an extension to Adel or Sparks. J. W. Oglesby is president, and C. T. Tillman, treasurer.

Union Springs, Ala.—The Union Springs & Northern Railway Co. is to issue \$1,000,000 of bonds to extend its line from Fort Davis to Tallahassee, about twenty-five miles. W. M. Blount is president at Union Springs.

Ware's Shoals, S. C.—C. G. Sayre is engineer in charge of the proposed electric road from Ware's Shoals to Barmore, five and one-half miles. Bids for construction will be asked within thirty days.

Washington, D. C.—It is reported that the Southern Railway will make extensive improvements at Birmingham, Ala. W. H. Wells is engineer of construction at Washington, D. C.

Washington, D. C.—Mr. F. B. Hubbell, vice-president and general manager of the Washington, Arlington & Falls Church Railroad, writes to the Manufacturers' Record saying that the proposed extension will be about nine miles long, and will connect Vienna and Fairfax Court House, in Fairfax county, Virginia. The survey is completed, and about one-quarter of the rights of way secured. J. A. Schleutner is engineer in charge, and the office of the company is at 3529 M street N. W.

Washington, D. C.—It is reported that the Southern Railway will build the Middleboro Mineral Springs Railway from Middleboro to Harlan Court House, Ky., forty miles. W. H. Wells is engineer of construction at Washington.

#### Street Railways.

Charleston, W. Va.—The Charleston Street Railroad is reported to have been purchased by the Elkins Syndicate, which will build an extension.

Chattanooga, Tenn.—Plans and estimates for the Chickamauga Park line of the Chattanooga Electric Railway are reported complete, and will be acted on by the stockholders March 17. Foster McFarland is the engineer. The line will be nine and one-half miles long.

Columbus, Ga.—The Columbus Railroad Co. has been granted a franchise in Phenix City.

Dallas, Texas.—J. P. Clark, general manager of the Dallas Street Railways, is quoted as saying that construction work on the extensions will begin as soon as weather permits.

Danville, Va.—The street railway company will, it is reported, build an extension from Reservoir Park to the site of the new cotton mill of the Dan River Power Manufacturing Co.

Kansas City, Mo.—The Metropolitan Street Railway Co. will build a loop.

Kansas City, Mo.—The Metropolitan Street Railway Co. will, it is reported, build an extension of the Independence-avenue line.

Little Rock, Ark.—Control of the Little Rock Traction & Electric Co. and the Little Rock Edison Light & Power Co. is reported to have been purchased by Isidore Newman & Sons of New York and New Orleans, who will, it is stated, make extensive improvements.

Louisville, Ky.—The Kentucky Traction Co. has been organized and has purchased the right of way over the Eighteenth-street road to Riverview. The incorporators are: President, F. P. Killner; vice-president, H. S. McNutt; secretary, Charles P. Dehler; treasurer, Joe Hermann; general manager, W. L. Weller, Jr.; attorney, Joseph Sachs. These, with Phil Ackerman, form the board of directors.

Memphis, Tenn.—The Memphis Street Railroad Co. will, it is reported, build several extensions and also construct an independent line to Overton Park. Frank G. Jones is vice-president.

Norfolk, Va.—The Norfolk, Portsmouth & Newport News Company has started work on an extension to South Norfolk.

Palestine, Texas.—The Palestine Street Car Co. has begun work on its proposed line. J. A. Gray is general manager.

Parkersburg, W. Va.—The Parkersburg & Ohio Valley Electric Railway Co. has given notice that it will apply for a franchise in the town of Friendly on March 31. The incorporators are V. B. Archer, C. L. Williams, T. J. Anderson, W. R. Smith, W. F. Smith, John H. McCoy, Clyde B. Johnson, E. R. B. Martin, R. J. A. Boreman and J. D. Livingston.

Pascagoula, Miss.—The charter of the Pascagoula Street Railway & Power Co. has been approved; capital \$500,000. The line is to be built through Pascagoula, Scranton,

East Side and Moss Point. The incorporators are Charles T. Ballard, J. D. Stewart, J. L. Helm, A. Cox, J. R. Todd and others.

Richmond, Va.—It is reported that the Virginia Passenger & Power Co. will rebuild the Seven Pines line at a cost of about \$45,000.

Roanoke, Va.—The report that the Roanoke Railway & Electric Co. will build an extension to Fincastle is officially denied.

Selma, Ala.—W. R. Hall of Selma and associates have applied to the city council of New Decatur, Ala., for an electric railway franchise. It is reported that three other companies are also asking for a similar franchise.

Washington, D. C.—It is reported that the Capital Traction Co. will extend its line from Chevy Chase Lake to Rockville, Md., about seven miles.

Wheeling, W. Va.—The Panhandle Traction Co., of which Howard Hazlett is president, has applied for a franchise to build an extension on Main, Twenty-second, Market and Tenth streets.

#### Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—See "Boiler and Engine."

Bakery Equipment.—See "Cereal Mill."

Boiler.—See "Pumps."

Boiler.—See "Foundry Equipment."

Boiler and Engine.—See "Oil Mill."

Boiler and Engine.—See "Mill Supplies."

Boiler and Engine.—See "Electric Plant."

Boiler and Engine.—See "Brick Machinery."

Boiler and Engine.—See "Woodworking Machinery."

Boiler and Engine.—Sunny Bank Canning Co., Reedville, Va., wants boiler and engine.

Boiler and Engine.—W. E. Small Spoke Manufacturing Co., Corinth, Miss., wants 80-horse-power plain engine and 100-horse-power boiler, with fittings.

Boiler and Engine.—A. H. Brower, Carthage, N. C., wants 10 or 12-horse-power boiler and engine (steam portable), new or second-hand; also drag saw.

Boiler and Engine.—H. M. Norwood, Youngsville, N. C., wants prices on new 20-horse-power C. C. engine and 25-horse-power Cornish boiler, delivered at Youngsville.

Boiler and Engine.—See "Cereal Mill."

Boiler and Engine.—Collins Light & Power Co., Collins, Miss., wants boiler, engine and pump.

Boiler and Engine.—George B. Hiaman, Atlanta, Ga., wants steam-driven air compressor of 100 cubic feet free air capacity, new or second-hand; also small hoisting engine for running brick elevator and 15-horse-power portable engine and boiler for use in construction of building.

Boilers and Engine.—Peacock's Iron Works, Selma, Ala., wants 80-horse-power second-hand engine and two 80-horse-power second-hand boilers.

Boilers and Engines.—See "Electric Plant."

Boilers and Engine.—Collier & Brown, Atlanta, Ga., want two new or second-hand 75-horse-power return flue tubular boilers with flush fronts, stacks and fittings complete, to stand Hartford insurance inspection for 100 pounds steam pressure; also want second-hand 125 to 150-horse-power high-speed automatic engine complete.

Box Manufacturers.—See "Lumber."

Brick Machinery.—G. W. Dean, Century, Fla., wants brick machinery of different kinds; capacity 20,000.

Brick Machinery.—Charleston Improvement & Investment Co., Charleston, Miss., wants brick machinery, including boiler and engine.

Brick Machinery.—Moberly Tiling & Manufacturing Co., Wilson Tate, president, Moberly, Ky., wants 35-horse-power engine, fire-brick machinery, iron roofing, etc.

Building Material.—See "Brick Machinery."

Building Material.—Z. T. Bailes, Fort Mill, S. C., wants roofing.

Building Materials.—See "Mill Supplies."

Building Materials.—John A. Sheridan, 321 North Holliday street, Baltimore, Md., wants building materials of all kinds.

Building Materials.—E. W. Stewart & Co., Staunton, Va., want structural iron, granite, terra-cotta, face brick, marble, tile, wainscoting, fireproofing, etc.

Building Materials.—James C. Johnson, Cambridge, Md., wants 10,000 feet of galvanized iron roofing; also information concerning suitable floor for factory building, concrete material or something similar.

Canning Machinery.—Thibodaux Preserving Co., Thibodaux, La., wants bids on complete equipment for cannery.

Carpet-cleaning Machines.—Thos. L. Carty, 504 Prince street, Knoxville, Tenn., wants addresses of manufacturers of carpet-cleaning machines.

Cereal Mill.—A. L. Stewart, Fort Worth, Texas, wants full equipment for cereal mill, including portable reel ovens, three dough mixers, dough roller, bread cutter and grinder, automatic weigher, cracker machine, engine, boiler, etc.

Cider Press.—W. F. Beverly, White Hill Plantation Co., Pretoria, Ga., wants press for making cider from pears and a still for making grape juice.

Cotton Compress.—See "Cotton Gin."

Cotton Gin.—Z. T. Bailes, Fort Mill, S. C., wants cotton gin and compress machinery.

Cotton Machinery.—W. T. Noblitt, Kerrville, Texas, wants estimates on cotton spinning machinery, knitting machinery (to use cotton or wool, or both) designed to be operated by water-power, where about 200 horsepower is available. He wants full information relative to enterprises indicated.

Cotton-mill Equipment.—Wm. M. Hamer, president Hamer Cotton Mills and of Maple Cotton Mills, Dillon, S. C., will want bids on equipment for two separate 5000-spindle mills.

Distilling Apparatus.—Moore, Barnes & Co., Brunson, S. C., want addresses of makers of stills for making spirits out of waste parts of trees, such as tops and stumps.

Dredging.—Sealed proposals will be received until April 15 at Engineer Office, U. S. Army, Room 2, Custom-house, Norfolk, Va., for dredging Hampton Roads, Va. Information furnished on application.

Drilling Equipment.—O. H. Blocker, Old Fort, N. C., wants to hire or purchase second-hand (Jackson) hand rock drill to cut 200-foot tunnel in hard rock.

Electrical Equipment.—F. M. Folk, Little Rock, Ark., needs boilers and electrical equipment for building.

Electric Plant.—Aiken Hotel & Improvement Co., Aiken, S. C., wants engines, boilers and electric plant.

Electric-light Plant.—See "Water-works."

Electric-light Plant.—City of Greens, S. C., desires bids for twelve to fifteen 3000-candle-power arc-light plant.

Electric Plant.—See "Oil Mill."

Electric Plant.—Senola Manufacturing Co., Senola, Ga., wants 15-horse-power engine and boiler, small dynamo for making fifty lights, incandescent.

Engine.—See "Brick Machinery."

Engine.—P. O. Box 284, Richmond, Va., wants compound engine (no boiler) that will develop 90 to 100 horse-power.

Engineers.—Alfred S. Emerson, Murphy, N. C., desires correspondence with electrical hydraulic engineers relative to electrical development of water-power.

Fertilizer Machinery.—See "Mill Supplies."

Fire-clay and Brick Material.—Westminster Gas Light Co., Westminster, Md., wants fire-clay and fire-brick material.

Foundry Equipment.—Alvey-Ferguson Co., Louisville, Ky., needs bending rolls for both sheet metal and angle iron, and a straightening machine for angle iron.

Foundry Equipment.—Anchor Stove & Range Co., H. Terstegge, president, Louisville, Ky., will want new boilers, 50 to 75 horse-power, and possibly new cupola about 72 inches in diameter.

Heating Apparatus.—W. R. Barringer, Florence, S. C., wants steam or hot-water heating apparatus for hotel.

Ice Machinery.—C. E. Wilkins, Manning, S. C., wants addresses of manufacturers of ice machinery.

Knitting Machinery.—J. H. Ruebush, Dayton, Va., wants information and prices on machinery for knitting hosiery and underwear.

Knitting Machinery.—See "Cotton Machinery."

Knitting Mill.—G. C. McEachern, Piedmont, S. C., wants prices on knitting machinery and full information as to the manufacture of knit goods.

Label Manufacturers.—W. F. Beverly, White Hill Plantation Co., Pretoria, Ga., wants samples of labels for fruit crates and jars.

Laundry Machinery.—Chas. I. Stengle, Fredericksburg, Va., wants to correspond with manufacturers of and dealers in steam laundry machinery.

Lime-burning Plant.—National Marble Co., Murphy, N. C., wants to correspond with makers of lime-burning plants.

Lumber.—John D. Evans, P. O. Box 605, Mobile, Ala., wants address of manufacturers of white pine and basswood lumber, such as is used for making wood boxes; also wants prices quoted on 300 feet of lumber twelve inches wide by three-sixteenths inch thick, dressed on both sides, and addresses of manufacturers of small white-pine boxes.

Machine Tools.—George Foundry and Machine Works, Rome, Ga., wants 24-inch by 12-foot engine lathe, second-hand, modern pattern.

Machine Tools.—Smith & Kilby Co., Annsonton, Ala., wants combination punch and shears to punch two-inch hole in one-and-one-quarter-inch iron and shear 1½x8 inches.

Metal-stamping Plant.—R. Brandt, 104 Clayton street, Athens, Ga., wants addresses of parties making machinery for metal-stamping plant, such as drop presses, metal-spinning machinery, double seamers, riveters, etc.

Metal-workers.—See "Metal-stamping Plant."

Mill Supplies.—See "Woodworking Machinery."

Mill Supplies.—Alabama Chemical Co., Montgomery, Ala., wants engines, boilers, pulleys, shafting, belting, mills, crushers, elevators, composition roofing and building materials.

Mining Equipment.—See "Railway Equipment."

Mining Equipment.—See "Railway Equipment."

Mining Equipment.—Central Mining & Development Co., Box 56, Little Rock, Ark., will want hoisting, crushing and smelting outfits.

Oil Mill.—L. A. Gains, Coldwater, Ga., wants machinery for 20-ton cottonseed-oil mill.

Oil Mill.—Columbia Cotton Oil Co., Magnolia, Ark., wants engine, boiler, electric plant and complete two-press cottonseed-oil mill.

Overall and Shirt Machinery.—F. P. Bacon, Tryon, N. C., desires correspondence relative to machinery for overall and shirt factory.

Piping.—W. F. Davis, 5 Chalfoux Building, Birmingham, Ala., wants 2500 feet of either five, six or seven-inch cast or wrought-iron pipe, second-hand.

Plumbing.—See "Sewerage."

Power Plant.—See "Water-works."

Pump.—See "Boiler and Engine."

Pumps.—Elberton Oil Mills, A. J. Little, manager, Elberton, Ga., wants underwriters' fire pump and quick-steaming boiler; size of pump, eight-inch suction and six-inch discharge; also wants pump six-inch suction and five-inch discharge.

Quarrying Equipment.—A. M. Higgins & Co., Norfolk, Va., want addresses of manufacturers or dealers in machinery for cleaning gravel and assorting or sizing the same.

Railway Equipment.—C. E. Hinckley, Knoxville, Tenn., wants a dinky locomotive 36-inch gauge, five to seven tons, and one ditto 24-inch gauge; new or second-hand.

Railway Equipment.—Battley Machinery Co., Rome, Ga., wants two eight or ten-ton 36-inch-gauge second-hand dinkies or small locomotive for ore-mining purposes.

Railway Equipment.—Homer Bowes, 611 Penn avenue, Pittsburg, Pa., wants three railroad steam shovels, 36-inch-gauge dinky locomotive, etc.

Railway Equipment.—Pilling & Crane, Girard Trust Building, Philadelphia, Pa., are in market for four or five 36-inch-gauge iron cars for handling ore; should be dump cars; second-hand preferred.

Roofing.—South Atlantic Varnish and Paint Works, Jacksonville, Fla., wants about 100 squares corrugated black iron roofing delivered at Jacksonville.

Saw-mill.—George Weiborn, Point Clear, Ala., wants to purchase second-hand saw-mill.

Saw-mill Machinery.—See "Boiler and Engine."

Screening Equipment.—See "Quarrying Equipment."

**Sewerage.**—Chas. C. Wilson, Columbia, S. C., is open for bids on plumbing and sewerage work for South Carolina College; cost about \$7500.

**Smelters.**—See "Mining Equipment."

**Soap Machinery.**—Prince Jackson, Marietta, Ga., wants full information regarding machinery for soap factory.

**Steel Construction Fireproof Record Rooms.**—Commissioners of Rockingham county, Spray, N. C., will hold meeting March 18 for receiving bids on fireproof record rooms for county. Address J. S. McAllister.

**Steel Springs.**—Oklahoma Advertising Co., Oklahoma City, O. T., wants 200 steel springs for use in holding advertising cards in street cars.

**Tack Manufacturers.**—Frank Wright, Cave Springs, Ga., wants addresses of manufacturers of brass numbering tacks for fly-screens.

**Telephone Equipment.**—R. W. Storrs, De Funiak Springs, Fla., wants telephones, wires, switchboard, etc.

**Textile Machinery.**—Senola Manufacturing Co., Senola, Ga., wants full equipment of machinery for manufacture of leggings.

**Tin-can Machinery.**—J. L. Leonard & Co., Cambridge, Md., will want machinery for tin-can factory of 30,000 cans per day capacity.

**Tower.**—Catawba Cotton Mill, Newton, N. C., wants steel tower for 10,000-gallon tank; second-hand will do.

**Vehicles.**—Hickman-Dupuy Livery & Transfer Co., Ensley, Ala., wants vehicles.

**Water-power Development.**—See "Engineers."

**Water-works.**—Geary, O. T., will open bids March 25 for construction of water-works. A. T. Kruse is mayor; C. L. Olds, Fort Wayne, Ind., consulting engineer.

**Water-works.**—Armes Durio, superintendent, Crowley, La., desires correspondence regarding engine, dynamos, wire, etc., for electric plant, and water pipes and fittings for water-works.

**Water-works.**—E. S. Hagan, clerk, Christiansburg, Va., will receive sealed proposals until April 1 for franchise for construction of system of water-works and for supplying power to the electric-light plant; bids for water-works to be based upon twenty-five fire plugs and cost of each additional plug above the twenty-five; power to include fifty kilowatts for electric plant and for each additional ten kilowatts above the fifty. Franchise will carry with it privilege of selling electric-power for commercial purposes. Usual rights reserved.

**Woodworking Machinery.**—G. S. Lindon, Washington, Ga., will want machinery to manufacture chairs, tables and bathtubs.

**Woodworking Machinery.**—Snow Hill Butter Dish & Basket Co., John H. Layton, general manager, Snow Hill, Md., wants machinery for manufacturing butter dishes, fruit baskets, etc., including boiler and engine.

**Woodworking Machinery.**—Rayboro Land & Lumber Co., Rayboro, N. C., wants following new or second-hand supplies: Hand or circular mill, capacity 30,000 feet or upwards; steel tubular boiler, 100 to 150 horse-power, four-inch tubes, stack, front, fittings, etc.; engine, 75 to 100 horse-power, automatic cut-off preferred; steam nigger, log loader or picker, 16-foot three or four-saw slab slasher, hog for grinding edgings, 10 to 20-horse-power steam engine, four-saw edger, planing-mill edger, surfacer and matcher, single or double surfacer, small size; resaw to resaw 10-inch stock, 8½-inch or 9½-inch by 30-foot or longer gunshot steam feed, log haul and chain complete, duplex pump for boilers, feeder two or two and one-half inches discharge, lath mill and boiler combined, lath binder and trimmer, also live rolls, sawdust chain, transfer and sprocket chains, etc. Full description and prices wanted.

**Woolen-mill Machinery.**—Park Woolen Mills, Rossville, Ga., wants eighty narrow looms, three sets 60-inch cards and three pairs mules.

### TRADE NOTES.

**Norfolk Wharf Property.**—A valuable wharf property located at Norfolk is to be offered for sale at public auction on March 25. This wharf fronts 240 feet on Elizabeth river, adjoining Norfolk & Western terminals. Messrs. Byrd & Balwin Bros., Haddington Building, Norfolk, Va., can give particulars.

**Northrop Loom Sales.**—One of the most successful textile machines ever offered is the Northrop loom. The superior advantages of this loom over previous styles are said to appeal to every cotton manufacturer who investigates. The loom is manufactured by the Draper Company of Hopedale, Mass., which

is publishing "Cotton Chats" relative to it. This leaflet, No. 15, dated February, shows the Northrop loom sales to mills of the United States, including orders on hand up to January 1. The total number is 78,590.

**Link-Belt Engineering Co.** at Savannah.—The well-known manufacturer, the Link-Belt Engineering Co. of Nicetown, Philadelphia, Pa., has found it necessary to establish an office at Savannah, Ga., in order to take proper care of its rapidly-growing Southern trade. The Savannah office is in charge of Wayne Cunningham, resident engineer.

**Circular-Saw Mill for Sale.**—An exceptional opportunity to secure a complete circular-saw mill of 30,000 feet daily capacity is now offered. This plant is composed of an up-to-date equipment for immediate delivery, ready for operation, and can be purchased at a low price. Southampton Lumber Co., Norfolk, Va., can be addressed for information.

**Coal and Iron Lands.**—Developments in West Virginia coal lands are attracting the attention of investors and operators in all parts of the country. Coal-bearing properties in the State are constantly being purchased for exploitation. A tract of 3000 acres of valuable coking-coal lands—fronting five miles on New river—will be offered at public auction in Charleston, W. Va., on March 16. Robert L. Parrish, Jr., trustee, Covington, Va., can give information. He will sell 9500 acres of Virginia iron-ore lands on March 17.

**A Woodworking Plant Available.**—W. W. Robertson of Norfolk, Va., office in Citizens' Bank Building, has purchased the D. S. Jones Lumber & Manufacturing Co. plant at Newport News. This includes buildings, power and about forty woodworking machines ranging from a 12-inch planer to the finest scroll machine. Mr. Robertson will dispose of this property either as a whole or separately. This is a good opportunity for any manufacturer desiring to locate at Newport News to obtain a good property at a low figure.

**Wolf Contract in Mexico.**—Our neighboring republic looks to the United States for a great part of its machinery. Mexico is not at all backward in adopting modern ways and means, as is evidenced every day by developments in that country. The Fred W. Wolf Co., 139 Rees street, Chicago, has just secured contract to build a 10-ton ice-making plant (the Linde machine) at Portofrio Diaz, Mexico, for Gus Ruthfuss of Eagle Pass, Texas. This contract was secured by E. P. Maddox of Fort Worth, Texas agent for the Wolf Company.

**An Industrial Opportunity.**—It is not often that an opportunity is offered to obtain possession of an established cotton-manufacturing business in the South. Yet such opportunities do occur at times, and one is now available to investors. Those desirous of investigating are advised to address A. S. Reid, trustee, Eatonton, Ga. He will sell Eatonton Electric Co.'s properties on April 6. A cotton mill of 2500 spindles and 100 looms, power plant, eighteen acres of land, electric-light plant and franchises, city lighting contract, etc., are included.

**Ball Engines.**—There is probably no make of engine more successful in direct connection with electrical generators than the Ball engine—automatic cut-off—built by the Ball Engine Co. of Erie, Pa. The company is constantly filling important contracts. Union Trust Building, Baltimore, has placed in operation an 80-horse-power direct-connected unit, Ball Engine Co. furnishing the engine and General Electric Co. the generator. Minnesota Iron Co., Eveleth, Minn., will have electric-lighting plant of 100 horse-power, Ball Engine Co. to furnish the engine.

**Peerless Rubber Manufacturing Co.'s Offices.**—C. H. Dale, president of Peerless Rubber Manufacturing Co., 16 Warren street, New York, announces that Chas. A. Hunter is appointed assistant to the president and general manager. Mr. Hunter will have entire charge of manufacturing departments, and superintendents of factories will report direct to him. Charles E. Prosser is appointed general sales agent; Richard B. Meany, superintendent of factories; Newton J. McKeon, assistant superintendent of factories, and F. C. Holland, general foreman of New Durham works.

**Otis Elevator Awarded Medal.**—The Otis Elevator Co. has been awarded the John Scott legacy medal and premium by the Franklin Institute for its electric elevator for private residences, which dispenses with the services of an attendant and is operated by merely pushing buttons at the various landings and in the car. The committee on science and the arts, which recommended

the award, made a thorough inspection of several existing installations, and its report is highly commendatory of the ingenuity of design, the safety of operation and the substantialness of construction of this elevator.

**Cheap Fuel and Free Sites.**—Progressive communities possessing manufacturing advantages should ever be on the alert to make known these advantages to prospective enterprises. The great fuel town of South Fairmont, W. Va., is now actively engaged in attracting investors. It offers cheap fuel, free sites, five-cent natural gas, an abundant supply of raw material, comprehensive transportation facilities and other requisites for manufacturing plants. Investigate the advantages of Fairmont before locating, correspondence being invited by the Fairmont Board of Trade, of which Sam. R. Nuzum is secretary.

**The Nerst Lamp.**—Kilburn, Clark & Co., Seattle, Wash., have been made Pacific coast sales and distributing agents for Nerst Lamp Co. of Pittsburgh, and have established branch offices in San Francisco and Los Angeles, Cal. The increasing volume of business from that section of the country has made necessary special attention to its demands. The Nerst Lamp Co., having secured patent and selling rights in Canada, is now making arrangements for establishing a factory in the Dominion. This move is not only necessary in order to conform with the Canadian laws of commerce, but is also advisable in order to meet the rapidly-increasing demands for this lamp.

**Alvey-Ferguson Labor-Saving Devices.**—Progressive establishments and business houses of various kinds are always ready to adopt improved labor-saving devices. In manufacturing labor-saving devices the Alvey-Ferguson Company, offices in Keller Building, Louisville, Ky., has been most successful. Its A. and F. conveyors, skids, trucks and kindred equipments have attained a reputation that is enviable in their field. The company finds the demand for its goods necessitating increased facilities, and it will build a new plant, including two brick buildings and boiler-house 40x100 feet each. Electricity will be used for distributing power from a direct-connecting dynamo.

**Delaware Charters Granted.**—Manufacturers and business men generally in the United States are realizing the advantages of obtaining charters of incorporation under Delaware laws. It is but seldom nowadays that one has to reason with a business man to present the advantages of incorporation. Delaware Charter Guarantee & Trust Co., Wilmington, Del., makes a specialty of obtaining corporation papers for companies. It offers its services and invites correspondence from those contemplating incorporation of enterprises of any character. The Delaware Company obtained charter last week for a \$250,000 liquid sulphur company and a \$250,000 fidelity warehouse, both at Baltimore.

**A Million Square Feet of Roofing.**—Many important contracts and extensive ones are being made in connection with the building improvements for the World's Fair at St. Louis. A roofing contract which has just been awarded is of especial interest. It calls for 1,000,000 square feet, or 10,000 squares of roofing on one single structure—the Agricultural Building. This is probably the record for the largest roof in the United States. The contract was secured by Trinidad Asphalt Manufacturing Co., 320 South Twenty-first street, St. Louis, manufacturer of Rubber Feltine Silicate Roofing, and that material is to be used. This company secured other important roofing contracts for the World's Fair.

**Messrs. Stringfellow & Webster.**—This firm has been organized and entered the iron, steel and coal business in all its branches. It is composed of Messrs. James W. Stringfellow and Royall T. Webster, with offices in Room 3, Columbian Block, Richmond, Va. Mr. Stringfellow has been in the iron business for about eight or ten years, and the knowledge he has obtained by his experience will enable the firm to handle most satisfactorily any transactions entrusted to its care. They will make a specialty of handling iron in its different forms. Prospective purchasers in the branches indicated will find it to their advantage to correspond with Messrs. Stringfellow & Webster. (Reference to this new firm was made last week.)

**Wire Rope for Cup Defender.**—The yacht now being built for the defense of the America cup will use 24,000 feet of wire rope for rigging. This rope will range from one-half inch to one and three-eighths inches in diameter, composed of six strands, each strand, for most of the rope, consisting of nineteen wires twisted together. The rope used for

standing rigging all contains a wire center, while the running rope has the strands twisted around a hemp center in order to give perfect pliability. The different ropes will be tested before shipping, each to show a strength varying from four and one-half tons for the smallest to ninety-four tons for the largest diameter. John A. Roebling's Sons' Company, Trenton, N. J., is manufacturing this rope.

**Successful Southern Wagons.**—Vehicles of various kinds are largely used in the South as well as in other sections. Southern manufacturers of wagons, carriages and other vehicles have assisted in meeting this trade, including a demand for specially-designed wagons in certain industries. The W. P. Horner Wagon Manufacturing Co. of Danville, Va., is one of the foremost wagon manufacturers of the South, and its product finds a ready market. The company's business last year was very large, and it reports the outlook for this year as similarly encouraging. Its No. 6 stiff dray is being used extensively for general hauling, especially by the Southern cotton mills. An illustrated leaflet concerning the Horner wagons can be obtained on application.

**Ruemml-Dawley Manufacturing Co.**—The demand for ice-making and refrigerating machinery continues to be active, and the Ruemml-Dawley Manufacturing Co. finds it necessary to enlarge its plant for manufacturing that class of equipment. This company has increased its capital from \$125,000 to \$300,000, all subscribed and paid in, in order to provide the additional facilities required. Its new additions are nearing completion in charge of Architects Messrs. Widmann, Walsh & Boisselier of St. Louis. In addition to the main shop for constructing ice and refrigerating machinery, the plant will now include a boiler shop, sheet-iron works and galvanizing shop. The Ruemml-Dawley Company expects to increase greatly its trade in the South. Its offices and works are located at 3900 Chouteau avenue, St. Louis, Mo.

**India Oilstone.**—This stone is manufactured by Norton Emery Wheel Co., Northampton, Mass., and marketed by Pike Manufacturing Co., Pike Station, N. H., sole selling agent. This latter company is well known to users of sharpening stones as one of the largest producers in the world. The India oilstone is what is usually termed an artificial stone, as distinguished from those stones cut from natural rock. It is made from pure crushed corundum, the hardest of all minerals, diamond alone excepted, and is therefore an extremely fast-cutting stone of remarkable durability. This stone has no hard or soft spots, the grain being entirely even; it is very strong, and will not break under any ordinary conditions. It can be made of any desired shape or size for special tools. Its extreme hardness fits it for cutting metals on which the very hardest tempered files will slip.

**Locke Steel Belt Co.**—This company is widely and most favorably known as the manufacturer of the tempered steel detachable sprocket chain and attachments. Reference to the enterprise at this time is prompted by the fact that the company has just completed a new and larger manufacturing plant. Its main building is two and one-half stories high, 60x200 feet, with boiler-house, furnace-room, etc., separate. Altogether it is a most complete and attractive plant, advantageously located at Bridgeport, Conn., for manufacturing and shipping. Under patented processes the Locke chain is made of steel upon automatic machines, and has met with a distinct and emphatic success, both in this country and in Europe, where a branch plant is located. Machinery manufacturers and others likely to be interested in further details regarding this chain are invited to correspond with the company.

**American Tool Works Co.**—Probably no class of American equipment is in greater demand than machine tools. The importance of machines of this character has attracted to their design and construction some of the foremost machinists of the day. These facts are brought to mind by mention of the American Tool Works Co. of Cincinnati, Ohio, that recent changes have been made in the personnel of its management. This management is now with Franklin Alter, president; Henry Luers, secretary-treasurer; J. D. Doan, general manager, and A. E. Robinson, general superintendent. This company's February business was next to the largest month in its history. The plant is exceptionally busy in all departments, and extensive alterations and improvements are now being made adapted to the increasing demand. Several new tools, embodying the latest idea in machine-tool construction, have lately been introduced by the American



company, and great success is attending their introduction.

**An Improved Dobby.**—This is a machine now being offered. In producing it the maker had the advantage of nearly thirty years of practical experience with this class of machine. It has features that are new and desirable. As for example: In order to obtain a uniform shed it is necessary that the back harnesses have a greater movement than the front. In this machine the hooks and jacks that operate the harnesses are, when at rest, on a perfectly straight line, and at no time while in action do they deviate from it. This is to obviate the liability of wear and breakage resulting from the twisting and crowding together of the jacks. The construction of the side-frames is such that it admits of easy access to all the internal parts. The material and workmanship are of the best. It is applicable to practically any style of loom, and excels in durability and wearing qualities. George W. Stafford Company, Readville, Mass., is the manufacturer.

**Hydrated Lime and Portland Cement.**—Contractors using lime and cement in the conduct of their operations will be interested to hear that the Charles Warner Co. of Wilmington, Del., has been making some tests along the line of mixing hydrated lime with Portland cement. The company has used its own materials in making the tests, so that it could be absolutely sure of the nature of the products being tested. The Warner Company believes that the use of hydrated lime will open an extensive field to the lime manufacturers of the near future. But as is often the case among men who are largely irresponsible, either from lack of knowledge on their subject or with the idea of false economy, a material is manufactured that is decidedly dangerous to the builder and contractor. Hydrated lime should not be used unless one is absolutely sure of the purity of the supply obtained. The Warner Company sells foreign and domestic cements, etc. It is sole agent for Nazareth Portland cement. Write for particulars regarding the tests referred to.

**Charles Efros Company.**—Present activity in all industrial avenues continues the large demand for electrical and steam machinery, railway and contractors' equipments and other mechanical apparatus and supplies. Not only new, but second-hand machinery and equipment in good operating condition finds a ready market. Handling second-hand machinery and putting it in proper condition for use by even the most exacting operators is the especial business of the Charles Efros Company of Bayonne City, N. J. This company's main office and works are located in Bayonne, at the Central Railroad of New Jersey, East Forty-ninth Street Station, and there it has the best modern facilities for its chosen work. The Efros stock-list at this present time is a very interesting one. It shows only apparatus that is in first-class condition and ready for immediate delivery. Included in the list is ten tank cars of 6500 gallons capacity each, two Worthington duplex air compressors, four Goulds triplex pumps, 100-horse-power boiler, a complete paraffine wax plant, and various other machines. Prospective buyers would find it to their interest to investigate.

**Alberger Condenser Co.**—Alberger Condenser Co., 95 Liberty street, New York, has acquired control of Newburgh (N. Y.) Ice Machine & Engine Co. This engine company has been long and favorably known as a builder of Corliss engines, ice machines and similar high-class machinery. It is understood to be the intention of the Alberger Condenser Co. to devote this works principally to the manufacture of improved condensers, vacuum pumps and Corliss pumping machinery, which it is using extensively in connection with high vacuum condenser installations. The recent developments in this class of work all tend toward the improvement of the parts that make up the condensing equipment. This has been largely brought about by the demand for an extremely high vacuum in connection with steam turbines and the inability of the old types of apparatus to accomplish the results required in an efficient manner. Alberger Condenser Co. still retains close connection with the Quintard Iron Works of New York, but rapidly-increasing business has made it necessary to obtain additional facilities for the manufacture of special lines of work.

**Mixtures of Hydrated Lime and Portland Cement.**—The recent introduction of hydrated lime and improved and economical processes has opened up possibilities in several ways. One of the most important of these is the mixing of hydrated lime with Portland cement. This mixture, made up in different proportions, can be used not only

to replace hard wall plasters, but to replace Rosendale cement, and with many advantages to the user. To determine what strengths can reasonably be expected with different mixtures, Messrs. Booth, Garrett & Blair (analytical and engineering chemists, of Philadelphia) have made a series of tests, taking different proportions of Nazareth Portland cement from the Lehigh district, and "Lincolnd," a hydrated magnesia lime, made at Cedar Hollow, Pa. The results of these tests and the chemical analysis made on "Lincolnd" are very interesting. They form a subject that should engage the attention of contractors, builders, engineers and others using limes and cements. Further interesting details concerning the subject can be obtained by addressing Charles Warner Company, Equitable Building, Wilmington, Del.

**Col. Henry Goslee Prout.**—Colonel Prout has been appointed first vice-president and general manager of Union Switch & Signal Co., Swissvale, Pa. He is well known as the former editor of the Railroad Gazette, and this publication in a recent issue presents a most interesting sketch of his life. After service in the American Civil War, Colonel Prout was engaged in railroad surveying and construction, afterward entering the service of the Khedive of Egypt as major of engineers. In Egypt he remained four years, reaching the grade of colonel in the general staff and governor-general of the provinces of the Equator. Upon his return to America he became signal engineer with the company out of which grew the Union Switch & Signal Co. In 1887 Colonel Prout became editor of the Railroad Gazette, and with that journal he established a high standard of editorship. In undertaking the management of the Union Switch & Signal Co. Colonel Prout brings to that corporation abilities that will enable him to accomplish most gratifying results in the advancement of that company's switch and signal apparatus, which is already extensively known, being used by the foremost railways of the United States.

**Crane Business of a Milwaukee Firm.**—Pawling & Harnischfeger, builders of electric traveling cranes, Milwaukee, Wis., find a very satisfactory demand for their products during the first two months of 1903. The record of an average of one crane order per day is still maintained, and the use of day and night shifts in their works is still required. Orders come in freely from all sections, though the iron and steel industries of Pennsylvania and Ohio continue being the heaviest buyers. Steam railroads are more in the market than heretofore, and the inquiries from electric railroads and electric-lighting plants indicate a growing desire for crane equipment. This firm states they find the domestic market of such strength as requires no solicitation for foreign business. The orders booked since the first of the year are partly represented as follows: Chicago & Eastern Illinois Railroad Co., Danville, Ill., three cranes; Western Tube Co., Kewanee, Ill.; the Westinghouse Machine Co., East Pittsburgh; South Pennsylvania Oil Co., Folsom, W. Va.; the Pittsburgh Plate Glass Co., Ford City, Pa.; Ansonia Brass & Copper Co., Torrington, Conn.; Fairbanks, Morse & Co., Beloit, Wis.; St. Paul Foundry Co., St. Paul; the Ingersoll-Sergeant Drill Co., Phillipsburg, N. J., fourteen cranes; American Bridge Co., Ambridge Works, Economy, Pa., five cranes; the Standard Steel Works, Burnham, Pa.; city of Boston, water department, Boston; Beloit Iron Works, Beloit, Wis.; International Steam Pump Co., Laidlaw-Dunn-Gordon Works, Elmwood Place, Ohio; Wheeling Steel & Iron Co., Benwood, W. Va.; the Coe Brass Manufacturing Co., Torrington, Conn.; the McConway & Torley Company, Pittsburg; the Ironton Engine Co., Ironton, Ohio, two cranes; Joseph T. Ryerson & Son, Chicago; Hammond Iron Works, Struthers, Pa.; Cambria Steel Co., Johnstown, Pa.; American Bridge Co., Pencoyd Plant, Pencoyd, Pa.; C. A. Lawton & Co., De Pere, Wis.; Perry-Mathews-Buskirk Stone Co., Bedford, Ind., two cranes; the Toledo Machine & Tool Co., Toledo; American Sheet Steel Co., Wellsville Works, Wellsville, Ohio; Landis Tool Co., Waynesboro, Pa., three cranes.

**York Manufacturing Co.**—This well-known maker of ice and refrigerating machinery keeps its plant at York, Pa., busily engaged in manufacturing the class of equipment referred to. The company's recent orders for ice machines were as follows: 40-ton for Fayetteville (Ark.) Ice & Cold Storage Co.; 25-ton for C. E. Wright Ice Co., Greenwood, Miss.; 15-ton for Purcell (I. T.) Water Co.; six-ton for Junction City (Ark.) Bottling Works; 15-ton for M. P. Skinner, Summerville, S. C.; 15-ton for Parks & Lucie, Helena, Ga.; 35-ton for Conron Bros., New York city;

25-ton for Hamlet (N. C.) Ice Co.; 50-ton for Broadway Ice & Coal Co.; 10-ton for Manhattan Electric Co., New York; 125-ton compression side for Mervin Provision Co., New Haven, Conn.; six-ton for Central Ice Co., Front Royal, Va.; 10-ton for Steele & McClintock, Bartlesville, I. T.; 100-ton for Utah Ice & Cold Storage Co.; 10-ton for Moore & Caine, Llano, Texas; 15-ton for Jesup (Ga.) Manufacturing Co.; 10-ton for Buckhannon (W. Va.) Light & Water Co.; 15-ton for San Marcos (Texas) Ice Manufacturing Co.; 10-ton for Varn & Beckett, Warsaw, Ga.; 25-ton for Consumers' Ice Co., Jackson, Tenn.; 50-ton for John R. Murray, Armerne, L. I.; 20-ton for Charleston (S. C.) Gas & Electric Co.; 50-ton for Independent Ice Co., Baltimore; 100-ton for Polar Wave Ice & Fuel Co., St. Louis, Mo.; 30-ton for Seventh District Ice Manufacturing Co., New Orleans; 40-ton compression side for Cerverceria del Pacifico, Mazatlan, Mexico, and many other contracts. Orders for refrigerating machines included the following: 65-ton (two each) for Scranton (Pa.) Cold Storage & Commission Co.; 40-ton for Union Brewing Co., San Francisco; 35-ton for Consumers' Ice Co., Jackson, Tenn.; 10-ton for I. W. Hoffman, Elizabethtown, Pa.; 30-ton for John Ebner Ice Co.; 100-ton for Jas. L. Humphrey, Jr., New Bedford, Mass.; 65-ton for Frank Stell Brewing Co., Baltimore; 65-ton for Huntington (W. Va.) Cold Storage & Commission Co.; 225 and 125-ton for Conron Bros., New York city; 10-ton for Mays Drug Store, New Orleans; 40-ton for Bruce Bros.' Brewery, Santa Rosa, Cal.; 175-ton for Duquesne Brewing Co., Pittsburg, Pa. The York Manufacturing Co. also received a number of contracts for expansion piping and other portions of ice and refrigerating plants.

### TRADE LITERATURE.

**Graphite.**—Such is the title of a publication issued each month in the interest of certain graphite productions. Graphite enters largely into use, and as people acquire a better understanding in regard to its different forms and their respective uses the demand correspondingly increases. Joseph Dixon Crucible Co., Jersey City, N. J., issues the publication referred to.

**Electric Hoists.**—Electric motors are fast displacing steam engines and shafting in many industries on account of their convenience and installation and economy in operation. Nowhere is this saving more apparent than in intermittent hoisting work. Electric hoists for manila or wire rope as manufactured by C. W. Hunt Co., West New Brighton, N. Y., are illustrated and described in a pamphlet now being issued. New York offices at 45 Broadway.

**Myers Pumps and Hay Tools.**—Probably no American-made machines and tools are more extensively used than the class which F. E. Myers & Bro. offer to dealers and users. Their force and lift pumps, hay tools and numerous other devices have achieved a reputation that is envied by less successful manufacturers. New illustrated circulars regarding the Myers product are now being issued. Consumers and dealers who fail to receive copies should write for them. The Myers plant is located at Ashland, Ohio.

**Pratt & Whitney Small-Tool Department.**—Can a small toolroom compete with a big factory? This pertinent question is asked in a leaflet now being issued by the Pratt & Whitney Co., Hartford, Conn., manufacturer of taps, reamers, ratchet drills, milling cutters, punches and dies, gauges, etc. The leaflet refers especially to the small-tool department of the company, an additional building for which has just been erected, fully doubling previous capacity. Users of machine tools will find facts of interest in this leaflet.

**Hot-Air Pumping Engines.**—Denney improved Rider and Ericsson hot-air pumping engines embody the very latest improvements in this type of pumping engine. All the requirements of modern successful practice, both through design and construction, are offered buyers of this class of mechanical equipment. It is claimed by the manufacturers of the Denney improved machines that they are the most reliable and economical on the market for pumping water within the limits of their capacity. Full details regarding the engines can be obtained through a perusal of the booklet issued by the American Machine Co. of Wilmington, Del., which builds the engines referred to.

**Shelby Inner Globes.**—During its long experience in the field of lighting, the Shelby (Ohio) Electric Co. has had frequent demands for inner globes for closed arc lamps. Heretofore the company has refused this branch of electrical trade, but recently it determined to engage in it, and is now pre-

pared to furnish the higher grade of inner globes. The company has issued an illustrated pamphlet of these globes, which include sizes to fit all makes of enclosed arc lamps. The Shelby equipment for this department is of the most modern character, and will produce globes that are mechanically accurate and of proper temper. Buyers in this field are requested to send for pamphlet.

**A Comprehensive Engine Test.**—With this title there has been issued a booklet giving particulars regarding certain engine tests made at Worcester (Mass.) Polytechnic Institute. The tests were made by Sidney A. Roove, professor of steam engineering. A Buffalo horizontal center-crank class "A" engine, made by the Buffalo (N. Y.) Forge Co., was used. The tests were most gratifying, and the results attained will interest engine-users everywhere. In a 26-hour test the result was: Pressure, 82.78 pounds gauge; horsepower, 69.67 (average); friction of the engine when run empty, 3.0 horsepower, equal to 4.3 per cent. of rating. Copies of the booklet can be obtained from the forge company. The booklet has been produced in a most attractive style, both as to letter press and paper.

**Baltimore City Directory, 1903.**—One of the most indispensable of publications is the city directory. It is especially valuable when its contents apply to the larger cities of the country. The city directory is doubtless more frequently consulted by the majority of citizens of every class than any other book. The seventeenth annual edition of the Baltimore City Directory is one of the best-arranged and most accurate publications of its character being received at this office, and the seventeenth annual edition has just been issued. It presents all the obtainable facts as to the population and the business enterprises of the city, the latter being classified to facilitate advantageous use. The new Baltimore directory contains 214,500 names, indicating a population of fully 697,125. Of that number, just 32,400 are located in the surrounding suburbs. This directory is sold at \$7 to non-subscribers. It is published by R. L. Polk & Co.; B. R. Sheriff, manager, Fayette and St. Paul streets, Baltimore.

**Something About Boiler Cleaning.**—Boiler cleaning is a subject that should always interest boiler-users. Those who operate steam plants and other establishments in which the boiler is the prime, or an important, factor know well how essential it is for satisfactory results that the boiler be kept clean. There are various devices on the market for keeping boilers clean. Mechanical Boiler Cleaner Co., 413 Western Union Building, Chicago, Ill., offers a device that it claims will keep boilers absolutely clean and free from scale, mud and oil. This cleaner is said to remove all impurities and foreign matter from the water before it settles. The manufacturer states it is the only floating skimmer. It keeps the outlet skimmer (controlled by steel floats) always at the same relative position with the surface of the water; hence its action is continuous, and the sediment is not allowed to accumulate in the boiler, being taken out as soon as it rises to the surface of the water. This cleaner is made under Garrigus patent. An interesting illustrated publication gives full details concerning the device. Its contents include a number of letters from leading industrial companies using the cleaner.

**Vulcanite Portland Cement.**—A plain, untechnical talk on Portland cement has been issued in illustrated book form. Its contents will prove helpful to and be appreciated by numbers of men whose busy vocations have prevented them from investigating in all its important phases a material which they are constantly using. The book enlightens the reader as to the value of good Portland cement, the skill and care necessary to produce it, the proper methods of using it and the improper methods to be avoided. The experience and knowledge, accumulated at the cost of time, labor and money, placed at the disposal of architects, builders and contractors, as well as the unprofessional consumer of cements, through the contents of the book herein mentioned will, no doubt, be appreciated and valued at its worth by a large circle of readers and users. The Vulcanite Portland Cement Co., main office in Real Estate Trust Building, Philadelphia, Pa., is publishing this book on cement. Its purpose in so doing is not entirely selfish nor prompted solely by the desire to exploit its own plant and products. But acquaintance with the literature on Portland cement forced upon the company the conviction that such a publication was destined to find a hearty reception, and hence it has been issued. Those who are interested can address the company direct for further information.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

## Review of the Baltimore Market.

Office Manufacturers' Record,  
Baltimore, Md., March 11.

The Baltimore stock market has been dull during the past week. The advance made by United Light & Power bonds was held, but United Railways issues were easier and slightly lower. Gas securities were quiet; Seaboard stocks went lower; there was no feature in Cotton Duck, and Brewery issues were scarcely visible. Trust-company and bank stocks were about steady, and investment securities continued in demand at firm prices.

In the trading United Railways common sold from 13 to 13½; the income bonds declined from 67½ to 67¼, and the 4 per cents fluctuated between 93¼ and 93½. Light & Power preferred sold at 39½, and the 4½ per cents at 88 and 88½. Consolidated Gas was traded in at 70 and 70½; the 5 per cent. bonds at 112¼ and 112½; the 6s at 110¼, and the 4½s at 101¼. Seaboard common sold from 25 down to 24¼, and the preferred between 41½ and 42; the 4 per cents changed hands at 83½, and the 5s at 102½ to 103. Cotton Duck common sold at 4 and 4¼; the income bonds at 30, and the 5 per cents at 72¾ and 72½. G. B. S. 1sts sold at 50.

In the trust-company group Continental sold at 200 and 200½; Maryland at 196¼ and 198; Union at 70, and United States Fidelity at 145. Citizens' Bank was traded in at 30½, Marine at 37½, Commercial and Farmers' at 130, Old Town at 10½ and German-American at 105½.

Other securities traded in were as follows: Virginia Century at 93½; Northern Central, 115 and 115½; Baltimore Fire Insurance, 23; Atlantic Coast Line common, 130; do. 1st consolidated 4s, from 94½ down to 93½; do. new 4s, 89; Georgia Southern & Florida 5s, 115½ and 115¾; Chiriqui Planting & Development Co. at 50 cents per share; Nashville Railway, 4½; Alabama Consolidated Coal & Iron common, 35; do. preferred, 82¼ and 83; Philadelphia Company, 44½; Lexington Street Railway, 50; Northern Central 6s, 1904, 103½; Charleston & Western Carolina 5s, 114¾; Georgia & Alabama Consolidated 5s, 110½ and 111; Lake Roland Elevated 5s, 119½; Baltimore, Chesapeake & Atlantic 5s, 112; Baltimore City 5s, 1916, F. L., 123; Georgia Southern & Florida 1st preferred, 100; Carolina Central 4s, 90½; City & Suburban 5s (D. C.), 99; Virginia Midland 2ds, 111; do. 5ths, 113; Baltimore Brick, 9; Baltimore City 3½s, 1928, 109½; do. do. 1930, 110¼; do. do. 1940, 112; do. 5s, 1916, W. L., 123½; Wilmington & Weldon 5s, 121.

## SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
March 11, 1903.

Railroad Stocks.	Par.	Bid.	Asked
Atlanta & Charlotte.....	100	100	170
Georgia Sou. & Fla. 1st Pref.....	100	100	100
Georgia Sou. & Fla. 2d Pref.....	100	100	81
United Railways & Elec. Co.....	50	12½	13¼
Seaboard Railway Common.....	100	24½	24½
Seaboard Railway Preferred.....	100	40½	41
Atlantic Coast Line of Conn.....	100	315	315

Bank Stocks.	Par.	Bid.	Asked
Citizens' National Bank.....	10	30	30½
Commercial & Far. Nat. Bank.....	100	125	130
Drovers & Mech. Nat. Bank.....	100	200	200
First National Bank.....	100	100	100
German Bank.....	100	107½	107½
Manufacturers' National Bk.....	100	102	102
National Bank of Baltimore.....	100	127	127
National Bank of Commerce.....	15	27½	27½
National Exchange Bank.....	100	194	195½
National Howard Bank.....	10	11	13
National Marine Bank.....	20	37	37
National Mechanics' Bank.....	10	31½	31½
Second National Bank.....	100	190	190

## Trust, Fidelity and Casualty Stocks.

Colonial Trust.....	50	20¼	31
Continental Trust.....	100	200	201
International Trust.....	100	100	143
Maryland Casualty.....	25	53	53
Maryland Trust.....	100	195	197
Mercantile Trust & Deposit.....	50	164½	164½
Union Trust.....	50	69	70
U. S. Fidelity & Guaranty.....	100	142½	146

## Miscellaneous Stocks.

G. B. & S. Brewing Co.....	100	11	14
United Elec. L. & P. Pref.....	50	38¼	39½
Cotton Duck Voting Trust.....	100	3¼	4¼
Consolidation Coal.....	100	95	95
George's Creek Coal.....	100	65	90
Consolidated Gas.....	100	70	70½

## Railroad Bonds.

Char., Col. & Aug. 2d 7s, 1910.....	117	120	120
Columbia & Greenville 1st 6s, 1916.....	118	118	118
Georgia, Car. & North, 1st 5s, 1929.....	109	110¼	110¼
Georgia, South. & Fla. 1st 5s, 1915.....	115	115¾	115¾
Georgia Pacific 1st 6s, 1922.....	123	124	124
Petersburg, Class B 6s, 1926.....	120	120	120
Savannah, Fla. & West, 5s, 1934.....	116	116	116
Seaboard & Roanoke 5s, 1926.....	112½	112½	112½
Virginia Midland 1st 6s, 1906.....	103½	105	105
Virginia Midland 2d 6s, 1911.....	111	112	112
Virginia Midland 5th 5s, 1926.....	112½	112½	112½
West. North Carolina Con. 6s, 1914.....	115½	115½	115½
Wilmington & Wel. Gold 5s, 1935.....	121½	121½	121½
Charleston City Railway 5s, 1923.....	105¾	107	107
Charleston Con. Electric 5s, 1929.....	95	95	95
Newport News & Old Pt. 5s, 1938.....	107	110	110
United Railways 1st 4s, 1949.....	93¼	93¼	93¼
United Railways Inc. 1s, 1949.....	67¾	67¾	67¾
Seaboard 4s.....	83	84	84
Seaboard 10-year 5s.....	102	102½	102½
Georgia & Alabama Con. 5s.....	110¼	111	111
South Bound 5s.....	110½	110½	110½

## Miscellaneous Bonds.

Mt. V. & Woodby's Cot. Duck 5s.....	71¼	72½	72½
Mt. V. & Woodby's Cot. Duck Inc. 30	31	31	31
G. B. & S. Brewing 1st 3-4s.....	49	50	50
G. B. & S. Brewing 2d Income.....	36	38	38
United Elec. Light & Power 4½s.....	87¼	88	88
Consolidated Gas 6s, 1910.....	110¼	110½	110½
Consolidated Gas 5s, 1939.....	112¼	112½	112½

## Railroad Reports.

The Gulf & Ship Island Railroad reports for December gross earnings \$137,792, increase \$23,176; operating expenses and taxes \$86,648, increase \$12,368; net earnings \$51,144, increase \$10,808; surplus after paying interest \$36,337, increase \$8063. For six months ended December 31 gross earnings \$843,869, increase \$176,139; operating expenses and taxes \$527,851, increase \$52,110; net earnings \$316,018, increase \$124,020; surplus after paying interest \$230,706, increase \$140,239.

The Louisville & Nashville Railroad reports for January gross earnings \$3,060,752.77, increase as compared with the corresponding month of last year \$335,997.18; expenses \$2,004,019.95, increase \$291,073.40; net earnings \$1,056,732.82, increase \$44,923.78. For seven months from July 1 to January 31 gross earnings \$20,548,947.95, increase \$2,652,765.02; expenses \$13,636,886.41, increase \$1,642,012.63; net earnings \$6,912,061.54, increase \$1,010,752.39.

The Norfolk & Western Railway reports for January total earnings \$1,776,202.30, increase \$259,582; total expenses \$1,006,001.84, increase \$216,592; net earnings \$680,200.46, increase \$42,990. For six months from July 1 to January 31 total earnings \$11,814,867.82, increase \$1,626,007; total expenses \$7,075,269.68, increase \$1,263,082; net earnings \$4,739,598.14, increase \$363,015.

The Southern Railway reports for January gross earnings \$3,503,039, increase \$218,352; expenses and taxes \$2,715,976, increase \$340,002; net earnings \$787,062, decrease \$121,649. For seven months from July 1 to January 31 gross earnings \$24,823,129, increase \$2,407,637; expenses and taxes \$17,672,431, increase \$2,296,278; net earnings \$7,150,697, increase \$111,358.

The Atlantic Coast Line Railroad Co. reports for January gross earnings \$1,563,092, increase \$118,173; operating expenses \$943,948, increase \$11,740; net earnings \$619,144, increase \$106,433. For seven months from July 1 to January 31 gross earnings \$10,515,229, increase \$1,286,298; operating expenses \$6,981,452, increase \$698,098; net earnings \$3,533,777, increase \$590,200.

The Louisiana & Arkansas Railway Co. reports for the quarter ended December 31, 1902, gross earnings \$121,429, decrease \$45,701; operating expenses and taxes \$84,935, increase \$17,570; net earn-

ings \$36,494, decrease \$22,141; net income \$41,507, decrease \$17,128. It is stated that the decrease in earnings is chiefly due to car shortage, and that the per diem system has materially increased the operating expenses.

## Nashville Railway Plan.

An offer has been made to the stockholders of the Nashville Railway Co. by Isidore Newman & Sons of New Orleans and Ladenburg, Thalmann & Co. of New York to purchase their stock at \$5 per share. The offer is made through the stockholders' committee, consisting of Frederick M. Colston, Douglas H. Gordon, Gustavus Ober and A. H. Rutherford of Baltimore, and R. Lancaster Williams of Richmond, Va. The charges will, it is said, be twenty-five cents a share.

The reorganization plan provides for the issue of \$6,000,000 of bonds, of which \$2,423,000 will be sold, \$2,577,000 will be used to retire underlying securities and \$1,000,000 will be reserved for the acquisition of additional property or for additional improvements, under restrictions in the mortgage. There will also be \$2,500,000 of preferred stock, of which there will be issued now \$1,995,500, and \$4,000,000 of common stock, of which there will be issued now \$3,500,000. The present stockholders will, it is stated, receive certain privileges under the reorganization plan.

## Street Railway Deal.

Advices from Little Rock, Ark., report that the Little Rock Traction & Electric Co. and the Little Rock Edison Electric Light & Power Co. have passed under the control of Isidore Newman & Sons, bankers, of New Orleans, the deal representing \$1,500,000. It is stated that there will be no change in the officers. The United Securities Co. of Boston has thus disposed of all its interest in the property, about two-thirds, the rest belonging to the General Electric Co.

## New Corporations.

A new bank is being organized at Milledgeville, Ga.

E. L. Dosenbach and others are organizing a new bank at Clayton, Mo.

The Mississippi Trust & Banking Co. has begun business at Jackson, Miss.

The Home Savings Bank of Fitzgerald, Ga., capital \$25,000, has applied for a charter.

The Grenada Trust & Banking Co., capital \$50,000, is being organized at Grenada, Miss.

The Island City Savings Bank of Galveston, Texas, will open a branch at Houston, Texas.

The Citizens' State Bank of Violet, Okla., has been authorized to begin business; capital \$10,000.

The Biloxi Savings Bank & Trust Co. of Biloxi, Miss., will, it is reported, be merged with the Bank of Biloxi on April 1.

The Evans Abstract Co. has been chartered at Greenwood, Ark., capital \$1000, by J. M. Spradling, president, and others.

A bank is being organized at Medina, Tenn., capital \$25,000. The officers are E. Rowlett, president; Mr. Bridgway, cashier.

A new bank has been organized at Carlisle, S. C., capital \$10,000. The officers are J. Epps Tucker, president; W. H. Gist, cashier.

The Faulkner County Bank has been established at Conway, Ark., with \$50,000 capital. W. W. Martin and others are interested.

The Bank of Duplin at Wallace, N. C., has been incorporated; capital \$10,000. A. L. McGowan of Wallace has been elected cashier.

The People's Bank of Sumner, Miss.,

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capital \$25,000, has been incorporated by Z. D. Jennings, J. J. Anderson, J. B. Webb and others.	
The Claxton Bank of Claxton, Ga., capital \$25,000, has been chartered. The incorporators are C. S. Grice, Eli Bullock and J. N. Collins.	
The Texas Trust Co. of Beaumont, Texas, has been incorporated, with \$100,000 capital, by R. D. Orr, R. R. Morris and J. B. Houchens.	
The Spencer Savings Bank of Spencer, N. C., has been chartered, with \$10,000 capital. Those interested are L. H. Battle of Greensboro and others.	

[For Additional Financial News, See Pages 30 and 31.]



See